THE MEDICAL NEWS.

A WEEKLY JOURNAL OF MEDICAL SCIENCE.

VOL. LIX. SATURDAY, JULY 11, 1891. NO. 2.

ORIGINAL ARTICLES.

THE USE OF MORPHINE FOR THE RELIEF OF CERTAIN URÆMIC SYMPTOMS.[1]

BY W. H. WASHBURN, M.D.,
OF MILWAUKEE, WIS.

THE purpose of this paper is to show that there are certain uræmic symptoms, convulsions, renal asthma, and severe cephalalgia, for the relief of which morphine is specially indicated. This conclusion I shall attempt to reach by the only two lines of argument that can be pursued, that is, both by the deductive and inductive methods.

In what is to follow I do not wish it to be understood that I attribute to morphine, used under these circumstances, a curative influence; my only claim being that it relieves distressing symptoms, without adding to the dangers under which the patient already labors, and thus gives the physician an opportunity to resort to other well-known methods of treatment, namely: (1) To reduce the supply of poisonous substances in the blood by regulating the diet, by bowel disinfection, and by attention to the functions of the liver; (2) the removal of uræmic poisons by venesection, purgation, or diaphoresis; (3) their oxidation by the use of oxygen or active exercise; (4) the relief of particular symptoms or antagonizing the poisons. The subject-matter of this paper, therefore, pertains only to the fourth indication.

Headache, drowsiness, coma, dyspnœa, vomiting, diarrhœa, disturbances of sight and hearing, muscular twitchings and convulsions, are the symptoms which appear, in varying combinations, in that condition to which the term uræmia is applied. These symptoms are the result of the retention in the blood of certain excrementitious substances which the kidneys, in the course of Bright's disease, acute or chronic, have been unable to eliminate. They are an expression of the deleterious effects of these poisonous substances upon the brain and nervous system. That these symptoms are not the result of the retention in the blood of urea has long been known, although under that supposition the term uræmia was applied to them.

The symptoms being thus various and diverse, it seems reasonable to conclude, and experiment has proved, that they are not the effect of any one or two toxic substances, although it is not possible to determine positively what particular symptom is caused by a given excrementitious substance. Experiments with a view to the elucidation of these problems, though surrounded by many difficulties, have been entered upon by Bernard, Traube, Frerichs, Feltz, Ritter, Lepine, Zalesky, McMunn, and many others. It has been shown, for example, that when the amount of urea in the blood is increased a diuretic effect is produced upon the kidneys; that when urea is injected into the blood of animals in any reasonable amount it is rapidly eliminated by the kidneys, and causes no uræmic symptoms (McMunn, *Clin. Chem. Urine*, p. 38). A guinea-pig died in two hours and seventeen minutes after receiving a subcutaneous injection of ten grammes of urea; a second died in twenty-one minutes after an injection of 128 cubic centimetres of urine, containing ten grammes of urea—thus showing that, although urea in large amounts is undoubtedly poisonous, the other constituents of the urine are much more so (Dr. F. P. Henry, THE MEDICAL NEWS, vol. liv., 1889, p. 477). *Creatinin* injected into the blood of dogs caused feebleness and muscular contractions. Ligating the ureters in snakes and birds, in both of which urea is excreted as uric acid, was followed by coma (McMunn, *op. cit.*), hence the theory that coma is probably due to the presence of an acid in the blood. That the potassium salts share in the production of the phenomena of uræmia has been experimentally shown (*Medical Record*, vol. xxxv., 1889, p. 493). Bouchard has demonstrated that the coloring matters of the urine give rise to at least some of the symptoms of uræmia (*Lancet*, vol. ii., 1885, p. 161). Cuffer thought uræmic symptoms were caused by the destruction of red blood-cells. Hughlings-Jackson attributed some of these symptoms to spasm of the cerebral vessels. In addition to the substances already mentioned there are leucin, tyrosin, creatin, and other nitrogenized extractives, besides ptomaines and leucomaines, which must be regarded as adding to the sum-total of the phenomena of uræmia.

In a given case the symptoms observed will, therefore, vary as the proportions of these different toxic substances in the blood vary. In one case vomiting and diarrhœa may be the prominent symptoms;

[1] Read before the Milwaukee Medical Society, April 14, 1891.

in another headache, asthmatic attacks, or convulsions; in still another, delirium, tinnitus aurium, hemiplegia, coma. The varying effects of uræmic poisons may further be observed in a study of the condition of the pupils. In uræmic dyspnœa the pupil is usually dilated, though when the condition deepens to one of apnœa the pupil becomes contracted. Dickinson (*Treatise on Albuminuria*) reports several cases of uræmic coma occurring in the course of granular degeneration of the kidneys, unaccompanied by muscular twitchings or convulsions, in which the pupils were contracted, or in which it is noted that one pupil was contracted. Roberts (*Urinary and Renal Diseases*) reports numerous cases of uræmia from obstructive suppression of the urine, in which the pupils were strongly contracted—great restlessness, insomnia, or vomiting and diarrhœa being the most prominent symptoms. Grainger Stewart (*Lectures on Albuminuria*) reports a case of uræmia resulting from granular degeneration of the kidneys, in which the pupils were contracted while the patient was delirious, drowsy, and breathing with difficulty. During the convulsions this patient had, the pupils were widely dilated; as the convulsive movements and twitchings subsided, the pupils again contracted. During the earlier stages of chronic interstitial nephritis the pulse is full and hard, and the blood-pressure high. It is during this period that the urine is increased in quantity, and its specific gravity is low. Later in the history of the disease the heart's action becomes impaired, blood-pressure is lowered, the urine decreases in quantity, and dropsical effusions and uræmic symptoms appear. The condition of the pupil bears a tolerably definite relation to the blood-pressure, so that when the pressure is high and the amount of urine large, the pupil is contracted or natural; when the pressure is low and the urine less abundant, the pupil becomes dilated (Kirk, *Lancet*, vol. ii., 1886, p. 1153, also Mickle, *ibid.*, 1154).

In uræmic poisoning, when convulsions, cephalalgia, or renal asthma constitute the predominant symptoms, we have, with the first two, spasm of the arterioles of the cerebral cortex; in the last, spasm of the pulmonary arterioles (Dr. Stephen Mackenzie, *Lancet*, vol. ii., 1889, p. 263), and, at the same time, rapid and ordinarily feeble pulse, low blood-pressure, dilated pupils, and diminished secretion of urine. In the case of renal asthma there is, as stated, spasm of the pulmonary arterioles; as a result of the consequent dyspnœa there is imperfect aëration of the blood; the abnormal blood, acting upon the vasomotor centres, and also upon the bloodvessels themselves (Foster's *Physiology*, Part II.), causes general arterial constriction and constriction of the renal vessels (as is shown by the actual reduction in the size of the kidney), and hence diminution in the urinary flow. The quantity of urine secreted in a given time is directly dependent upon the blood-pressure (McMunn, *op. cit.*, 13); and hence the amount of urine will be increased by any condition that increases the general blood-pressure, unless there is at the same time constriction of the renal arteries. The objects then to be accomplished under such conditions as these are: To relax the spasm of the arterioles of the lung and of the cerebral cortex; to diminish nervous sensibility, both sensory and motor; to increase the general blood-pressure while relieving the constriction of the vessels in the kidneys, thus increasing the urinary secretion. Have we a drug in the materia medica the exhibition of which can reasonably be expected to fulfil these various indications? I think we have.

In considering the physiological effects of morphine, in full therapeutic doses, it will only be necessary to inquire into its effects upon the nervous and circulatory systems and upon the action of the kidneys. Its effects upon the nervous system are to lessen sensibility, both sensory and motor, thus relieving pain and relaxing spasm. Acting upon the circulatory system it at first produces temporary acceleration of the pulse-rate, soon followed by slowing and increased fulness and force as a result of the action of the drug upon the inhibitory cardiac nerves. The blood-pressure is thus increased. There is no unanimity of opinion as to its action upon the kidneys, some authors affirming that it increases the flow of urine, and others that it diminishes the flow. At all events, it is perfectly clear that it sometimes does increase the amount of urine, and that it must do so by its action upon the blood-pressure and by the relief of local arterial constriction. When retention of urine follows the use of morphine it results from the blunted sensibility of the bladder. Morphine increases the excretion of urea in man (Sfubini, quoted by H. C. Wood, *Therapeutics*, 7th ed.), and contracts the pupil.

We thus have *à priori* the clearest and strongest possible grounds for administering morphine for the relief of the conditions named—convulsions, renal asthma, cephalalgia. The indications sought to be fulfilled—relief of spasm, alleviation of pain, increase of blood-pressure, and hence increase in amount of urine—are exactly met by the known physiological effects of the drug. At this time, however, we are fortunately not limited to *à priori* reasons for anticipating favorable results from the use of this drug; there are abundant facts *à posteriori* to substantiate the validity of the deduction that, the conditions indicated being present, neither in acute nor in chronic uræmic intoxication will morphine add to the dangers already existing, but that it will uniformly produce happy results.

The history of the use of morphine in such cases reaches back to as early as 1868, when Loomis first used the drug hypodermatically in a case of acute uræmia. Dr. Bontecou (*New York Medical Journal*, vol. xi. p. 176), in 1870, gave by this method three-fourths of a grain of morphine to a woman who had just had a puerperal convulsion; in about one hour she had another eclamptic seizure and became comatose; nevertheless, another injection of one-half grain of morphine was given. There were no more convulsions for six days, when a severe paroxysm occurred; the woman received at once one grain of morphine hypodermatically, delivery was effected, and recovery took place. R. E. Johnson (*Lancet*, vol. ii., 1889, p. 14) has reported a case of puerperal eclampsia, in a young primipara, in which the urine was scanty and contained albumin. The case was treated with large doses of tincture of opium for two or three days; the sensibility of the bladder was so blunted that retention of urine resulted, but by means of a catheter about the normal amount of urine was withdrawn. Profuse diaphoresis followed the use of the opium, the convulsions ceased, and the patient made a good recovery. Alfred Grace (*Brit. Med. Jour.*, vol. i., 1889, p. 588) has reported two cases of puerperal eclampsia treated by large doses of morphine administered hypodermatically, one case receiving one grain as the first dose: both cases recovered. Obstetric literature has for some years past been replete with favorable reports of similar experiences from both sides of the Atlantic. In fact, so uniform have these results been that it may be fairly stated that Dr. Fry (*Am. Journ. of Obst.*, vol. xxi., 1888, p. 536) gave expression to the dominant opinion when he said: "In the treatment of puerperal eclampsia, we have as palliatives chloroform, potassium bromide, chloral hydrate, and morphine. Of these, morphine administered hypodermatically is by far the most reliable." That the convulsions of puerperal women are, in most cases, if not in all, of uræmic origin, is generally admitted, so that the treatment of puerperal eclampsia, so far as palliative measures are concerned, resolves itself into the question of the treatment of uræmia.

The field of usefulness of morphine in uræmia, as stated by Purdy (*Bright's Disease and Kidney Affections*, p. 84), is not confined to convulsive seizures. Morphine is not less serviceable in the relief of renal asthma and severe headache occurring in the course of chronic Bright's disease. About a year ago I had under observation for several weeks a case of chronic interstitial nephritis. There had been one slight convulsive seizure, but the symptom which rendered the patient's life intolerable was excessively severe and continuous headache. Ordinary means afforded no relief, and finally morphine was given and with the most satisfactory result. My notes of the case show that the pupils were dilated, and that, as a rule, the pulse was slow and weak. For the thirty days during which morphine was administered the average daily amount of urine passed was 41 ounces, whereas 32 ounces had been the daily average for some days previously. As to the elimination of urea during the thirty days of morphine treatment, the amount varied from 304 to 472 grains per day, which, considering the non-nitrogenized diet of the patient, was a fair amount. Therefore, it cannot be said that in this case the opiate reduced the amount either of urine or of urea.

Dr. Stephen Mackenzie (*Lancet*, vol. ii, 1889, p. 209) reports a case of chronic uræmia, in which the most urgent symptoms were insomnia, headache, and dyspnœa; after exhausting other resources, he prescribed morphine with the most gratifying results and complete relief of all distressing symptoms. In this case, it is noted that before morphine was prescribed the patient was daily passing 4 ounces of urine of a specific gravity of 1010; the heart's action was irregular. Subsequently, while the patient was under the morphine treatment, the daily amount of urine was from 28 to 32 ounces, with a specific gravity of 1008, and the heart's action became regular and steady. Carter (*Brit. Med. Journ.*, vol. i., 1889, p. 943) treated a boy, twelve years old, who was suffering from uræmic convulsions, with hypodermatic injections of morphine, which arrested the convulsions, and the boy recovered. He has treated many other cases in a similar manner, and with equally happy results. Carter remarks that a contracted condition of the pupils is a contra-indication to the use of morphine. Ralfe also records cases of uræmic dyspnœa completely relieved by the use of morphine, with no untoward symptoms following.

The foregoing cases are selected from among very many of the same kind, which might be easily drawn upon to furnish the inductive proof of the deductive conclusion arrived at—that morphine, administered in the manner indicated, *does* relieve spasm and mitigate suffering, and does *not* interfere with the action of the kidneys. It is true that cases of nephritis have been reported in which comparatively small doses of opium or Dover's powder have been closely followed by coma and death, but in view of the facts on record and the natural history of the disease, coma and death often following very closely upon convulsions in which no opiate was used (Roberts reports a most instructive case of this kind), and when the disease was *not* far advanced, it is *not* a legitimate conclusion that the fatal issue was caused or hastened by the drug.

In therapeutics there can be but two guiding principles: the empirical, or that based upon the

results of experience, and the scientific or rational. If the facts stated in this paper are not entirely chimerical and imaginary, we are warranted by both these principles in the use of morphine for the relief of the uræmic symptoms dwelt upon, namely: convulsions, dyspnœa, or renal asthma, and cephalalgia, all accompanied by dilated pupils. Opinions and practices handed down to us from the past are, however, often clung to with great tenacity, particularly when indorsed by eminent men. The great University of Salamanca questioned the value of Newton's discovery one hundred years after the publication of the *Principia*. Innovations are looked upon with dread. In ancient Egypt, the law defined the mode of treatment to be pursued in every disease, and if a physician deviated from the prescribed methods, and his patient died, his life paid the forfeit. In the last half of the last century (Buckle, *Hist. Civilization*, vol. ii. p. 75) some bold innovator suggested that possibly the great prevalence of disease in Madrid might be due to the filth which for centuries had been accumulating in the streets and alleys of the city. A meeting of medical men was held to discuss the question and after mature deliberation they concluded that it was best to let the filth remain; that their fathers were wise men, and had not disturbed it, probably having good reasons for not doing so; that in all probability the gases arising from the decaying animal and vegetable matter rendered the air heavier, thus rather tending to lessen the prevalence of disease; and, moreover, cleaning the streets would only be an experiment, and no one could see the issue of new experiments.

Although morphine has been used in cases of acute uræmia for more than twenty years, and in cases of chronic uræmia for several years, and with results as uniformly happy as attend the use of any other drug in any other condition, and although the indications to be fulfilled call for the administration of a drug producing physiological effects identical with those resulting from the use of morphine, there are still those in the profession who are oppressed by the unsupported traditions of the past, and regard its use with apprehension.

803 GRAND AVENUE.

CHRONIC ENDOMETRITIS.[1]

BY J. S. CAIN, M.D.,
OF NASHVILLE, TENN.;
PROFESSOR OF THE PRACTICE OF MEDICINE AND GENERAL PATHOLOGY IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF TENNESSEE.

ALTHOUGH the title of my paper would embrace the entire uterine canal, cervical as well as corporeal, I shall restrict what I have to say to the diseases of the body of the organ, only alluding to the pathology of the cervical portion proper when it becomes necessary to do so in treating of endometritis in general. The question as to the localization of the chronic form of endometritis is rendered more prominent than that of the acute form, on account of the conflicting opinions entertained by distinguished authors and teachers. None, I believe, question the frequent occurrence of chronic cervical endometritis, but Drs. Emmet, Bennett and other distinguished authorities almost absolutely ignore the existence of chronic corporeal endometritis as a special disease, and consequently, except for the relief of hemorrhages and to meet temporary emergencies, discountenance all intra-uterine medication, relying entirely upon treatment directed to the uterine os and vault of the vagina; but the great preponderance of medical authority is adverse to the opinions entertained by these gentlemen, and with this class I am entirely in accord. Dr. Arran says: "Internal chronic metritis is more frequent in the cavity of the body than in the cavity of the neck of the womb, notwithstanding all that has been said to the contrary," and this opinion is concurred in by Dr. West and others.

Chronic endometritis and the conditions necessarily allied therewith are the most common as well as the most important diseases with which the gynecologist has to deal. Chronic endometritis is often a sequela to the acute form of the disease and is a result of repeated acute attacks. It matters not how or from what source the outbreaks originate, whether from catarrhal, specific, traumatic or internal constitutional causes, they often (but not always) constitute the starting-point from which not only the endometrium, but also all the uterine and peri-uterine structures become involved. I will venture the assertion that, while the change in structure and function of the lining membrane of the uterus often seems to be the most prominent condition and that which demands first and most careful attention, this tissue is probably never chronically diseased without a corresponding involvement of all the uterine structures. The starting-point of these troubles has of late years provoked more or less discussion and revealed differences of opinion among scientific investigators. Doléris and many others believe that acute endometritis is necessarily the initial lesion in every parenchymatous inflammation of the uterus or of the peri-uterine tissues, and that when acute lesions of these structures disappear chronic endometritis remains. Modern pathology strongly inclines to the belief that inflammatory affections of peri-uterine structures, most notably the tubes, are often secondary to involvement of the vaginal and uterine mucous membrane—and gonor-

[1] Read before the Tennessee State Medical Society, April 14, 1891.

rhœa comes in for no small share of the blame. That chronic endometritis does often originate from acute invasions of the uterine mucous membrane there can be no question. These leave their effects upon the endometrium in inflammatory thickening and hyperplasia and in adenomatous degeneration of the abundant glandular structures, thereby unfitting the organ for the normal performance of menstruation and all other functions belonging to it, and resulting in hemorrhages and leucorrhœa, as well as numerous other morbid conditions to be described. Ziegler says that "hyperplasia of the uterine mucous membrane is very common," and that it causes "changes in structure and appearance, with polypoid and fungoid excrescences and enlarged and hypertrophied utricular glands, which when pared off by the surgeon present the appearance of adenomata." This condition of the uterine mucosa, by interfering with the circulation in the organ, probably always produces more or less hyperplasia in the uterine muscular and connective tissues. Dr. Stimson, an able writer and accurate thinker, emphasizes the importance and the far-reaching effects of this pathological obstruction in the following language: "The obstruction of the return current in the uterine mucous membrane, and the resistance of the diseased membrane often result in hæmatocele."

Probably the most common form in which we encounter the condition of the lining membrane of the uterus known as chronic inflammation, and which has all of the pathological characteristics of that disease, comes on without any appreciable antecedents. I have asserted with authority that uterine hyperplasia is often a concomitant and sequence of chronic endometritis. Now, this order may be reversed, and I may assert that endometritis is frequently dependent upon and produced by uterine subinvolution, or the condition denominated by Dr. Thomas areolar hyperplasia, or it may grow out of or develop from diseases located in other pelvic organs, such ovaritis, in which event the chronic form of endometritis comes on and develops to its pathological acme, without passing through any appreciable acute stage.

Lawson Tait, in his recent excellent work on *Diseases of Females*, asserts that "chronic endometritis may result from the acute process, but it is infinitely more frequently associated with the chronic metritis resulting from subinvolution. It is sometimes met with in young, unmarried women, associated with chronic ovaritis; it is then a fertile source of bad health, and when they come to be married, of sterility." Thus areolar hyperplasia or sclerosis of uterine tissue, by interfering with the circulation in and the nutrition of the lining membrane of the organ, brings about a state of degeneration of tissue clinically similar to, if not pathologically identical with, chronic endometritis. The thickening of tissue, the tendency to fungoid degeneration, and adenomatous conditions of the glandular structure, all interfere with menstruation and call for similar treatment. Displacements and malpositions of the uterus, by obstructing and interfering with the normal circulation, often result in the same condition and may be considered as common causes of chronic endometritis. This view of displacements interfering with uterine circulation is, however, disputed by Dr. John Williams, of London, who seems to have given some study to the matter, and who maintains that changes in the position of the organ, owing to the arrangement of the blood-supply do not at all interfere with its circulation. Many others entertain similar opinions and pay but little attention to the restoration of the uterus to its normal position in the pelvis as one of the steps necessary to the relief of its chronic inflammation. In this matter I must, however, concur with Dr. Stimson, who believes "the uterus to be an organ of very great variations in vascularity," and conclude that changes in position consequent upon hyperæmia, enlargement of the organ from whatsoever cause, relaxation of ligamentous, muscular and connective-tissue supports, all tend to throw it out of its normal anatomical relation, to interfere with the circulation and nutrition, and to develop the diseased condition of the endometrium as described.

After this brief review of the etiology and pathology of the disease under discussion, having determined its presence by the well-known symptoms and signs, having made a careful differentiation between the corporeal and cervical forms, and having excluded the possibility of malignancy (probably one of the most difficult problems which the general practitioner or even the gynecologist is called upon to solve), we come to the subject of treatment. I would formulate the indications for treatment as follows: Remove, as far as possible, all constitutional, predisposing and disease-fostering causes that may exist in the patient or in her environments; restore, as far as possible, the uterus to its normal position in the pelvis, thereby correcting the cause of obstructed circulation, and deplete the engorged tissues by all means at command; remove adenoid and fungoid vegetations from the cavity of the uterus, if they exist, and endeavor by local, therapeutic measures to restore the endometrium to a condition as nearly normal as possible. The indications are plain enough, but in carrying out the treatment to a successful result is encountered one of the most difficult problems in medicine. I will venture the assertion that the condition of the uterus, in which some or all of the pathological changes noted exist, from chronic

subinvolution to fungoid vegetations of the mucous membrane, with the corresponding train of symptoms, may be palliated by treatment, but it is not within the province of remedial measures to restore the organ to perfect normal function.

To accomplish the first indication in treatment a most rigid investigation should be instituted as to the existence of constitutional causes. Dyscrasiæ, if detected, should be combated with hæmatic reconstructives; struma, with sulphide of calcium, the iodides, cod-liver oil, etc.; arthritis, with iodine, lithates and salicylates. If anæmia or toxæmia exist to such a degree as to interfere with normal repair, tonics and ferruginous reconstructives are to be administered. If digestion and assimilation appear to be defective, an appropriate and nutritious diet, artificial digestants, tonics and eliminants, nearly always embracing arsenic in some form, are indicated. This line of medication, with a due regard for the sanitary environment of the patient, constitutes our general therapeutic resources.

To meet the next indication a great variety of measures has been resorted to. Pessaries and supporters of every conceivable design, abdominal, vaginal and intra-uterine, have been used; and while pessaries, judiciously selected and intelligently employed, after all active symptoms have disappeared and laxity of fibre and defective support of the organ remain, sometimes give great relief, I think it may be safely said that during the active existence of the disease all pessaries are worse than useless. The idea of employing some soft, elastic, light material as a support for the uterus, which, while it serves the purpose of holding the organ *in situ*, might at the same time be used as a means of accomplishing the local application of medicaments to the vagina, os and cervix, was early conceived. Soft sponge was thus employed. This article soon developed objectionable features, in consequence of its irritation to the tissues, as well as its tendency to become offensive and harbor germs and poisons. The support of the womb by a tamponade of cleaned and medicated cotton next came into use and has remained popular with the profession for many years. Drs. Mundé, Goodell and others have used this plan of treatment with great satisfaction when properly applied—so as to exert pressure upon the engorged cervix while it supports the decadent and always heavy womb. This mode of treatment evidently accomplishes good results; besides, it may be made to subserve a most valuable purpose by maintaining a constant supply of glycerin, either medicated or anhydrous, in contact with the region in which local depletion is to be accomplished. The tendency of cotton, however well prepared, to pack and become inelastic suggested the employment of some agent free from these objections; hence the introduction of jute and wool, which have been so popular of late, especially for dry treatment. The hard and irritating qualities of these textiles, with their poor absorbing properties, have been thought objectionable, and a compromise has been effected by combining cotton with the other articles, a combination which just now probably constitutes the best vehicle before the profession for vaginal tamponade.

In cases in which decided chronicity exists, with sclerosis of uterine tissue, constitutional measures will doubtless prove of but little avail in the treatment, but when there yet lingers an acute condition, evidenced by tenderness on pressure and inflammatory engorgement, much good may be accomplished by constitutional and general means. Depletion of the pelvic organs by saline purgatives, systematically employed, when the blood-supply and other conditions warrant it, should not be neglected. Scarification, leeching, bleeding the os by puncturing and depletion by the use of glycerin—each has its advocates, and doubtless each possesses some merit. Iodine, in the form of the tincture, applied to the vault of the vagina is a favorite remedy with many.

Internal therapeutic remedies are almost universally employed in this class of cases. Ergot, for its supposed influence in cutting off and lessening the blood-supply to the uterus, is unquestionably a deservedly popular remedy. The iodides are extensively used in this form of chronic endometritis attendant upon uterine subinvolution, with subacute or lingering acute characteristics. Bromide of potassium is regarded by many as almost specific. Mr. Lawson Tait regards the benefit derived from this salt as due alone to the potassium, and believes that other salts of potassium besides the bromide are equally efficacious, and in some way not explicable prove valuable remedies in these cases. He is particularly partial to a combination of the fluid extract of ergot and chlorate of potassium in what I would consider extremely minute doses. I have often with satisfactory results employed the ergot with bromide of potassium, but feel inclined to attribute the results to the ergot rather than to the combination.

Some practitioners reject the whole system of local depletion, except by Dr. Emmet's method of long-continued vaginal irrigation with hot water, followed or alternated with glycerin tamponades; while I have fallen into the popular use of hot-water irrigation in nearly every diseased condition of the pelvic organs, as taught by Dr. Emmet, and believe that the treatment, when properly administered, has a field of vast usefulness, especially when the disease is located in the cervix or in the pelvic tissues below the cervix. Still I am convinced that

the treatment has become very much of a hobby with the profession, and is often made to do duty when it cannot possibly be of the least benefit. Granting all the therapeutic effects claimed for the treatment, after long investigation and study I doubt if it has any effect whatever in depleting an engorged uterus or in lessening the blood-supply to the body of the organ; except for purposes of cleanliness and as an auxiliary to other treatment, it might well be dispensed with in all diseases situated above the internal os.

Chronic endometritis, in its legitimate and almost universal course, implies a degraded condition of the tissue, characterized by a fungoid and adenomatous degeneration, with a tendency to hemorrhage and mucous and muco-purulent discharges; probably no department of my subject has provoked such wide diversity of opinion as has the treatment of this peculiar condition. Except for the relief of the fearful hemorrhages which frequently attend it, many of the best practitioners are inclined to let the interior of the uterus severely alone and not to invade it with either instruments or other therapeutic measures. While the great majority of practitioners and gynecologists strike at this symptom of the disease as the all-important matter to be combated, nearly every author and teacher in this department has his own peculiar views upon the subject. Dr. Emmet is opposed to the practice of making applications to the interior of the uterus. He claims that the discharges from the lining membrane are in general the result of hyperæmia, which is secondary to pathological or mechanical changes outside of the uterus, and that the rational treatment consists in measures directed to the cause and not to the consequence; and, therefore, except for the relief of hemorrhage resulting from vegetation, the relies upon vaginal medication applied to the os. Diametrically opposed to these views are those entertained by Doléris and a host of others, who agree with him in the main, but who differ somewhat in the methods of accomplishing the objects sought. He maintains that the lesion is in the endometrium, and that therefore the treatment must be local and directed to that particular tissue. His practice is to thoroughly dilate the cervix with aseptic tents when necessary, and then to curette the uterine cavity, swab it out with a 1:4 solution of carbolic acid and wash it out with a 1:2000 sublimate solution. Dr. Mundé also favors intra-uterine medication; he protests against the growing tendency to abandon medication applied above the internal os and believes that we herein possess a means of treatment for which there is as yet no adequate substitute.

The use of strong caustics and escharotics is favored by many. Nitric, chromic and carbolic acids, iodine and desiccated sulphate of zinc, all have their advocates; and if we can rely upon the reported cases of Rheinstädter, as affirmed by Brŏso, Fränkel and Dumontpallier, intra-uterine cauterization with chloride of zinc has accomplished marvellously good results in his hands. During the last ten years he has employed the treatment in nine hundred and seventy cases. He applies the zinc twice a week; six weeks are sufficient to bring about a cure. Ergot, hot-water douches and glycerin tampons, with the zinc cauterization, will within three months reduce the largest and hardest uterus to normal conditions, both in size and secretion. Others assume a middle and more conservative ground in the treatment of chronic endometritis. Dr. Engelmann, although not entirely disapproving of intra-uterine medication, believes that its sphere of applicability is greatly narrowed and that rarely should any but the milder agents be used. Vaginal or indirect medication by means of dry tampons of cotton, wool or jute, impregnated with various agents or serving as carriers of powders, is, in his opinion, in the vast proportion of cases sufficient, and withal without the possibility of the ill-effects that may follow intra-uterine applications.

Another treatment, of late coming into vogue, in which I have considerable confidence, especially in cases of long standing and decided chronicity, is known as Vulliet's method, practised by Landau, Chrobak and many others. It consists in thoroughly dilating the cervix and packing the cavity of the uterus with gauze or wicking, medicated with iodoform or other agent. The application must be made with the patient under the influence of an anæsthetic; the packing should be removed in twenty-four hours.

Dr. Alexander Dunn, in *The British Medical Journal*, has recently reported wonderful success in the treatment of chronic endometritis with boric acid. He says that, "having obtained the most decided benefits in the treatment of vaginal leucorrhœa and erosion of the os and cervix, both acute and chronic, from vaginal applications of boric acid," he "not long since designed a convenient form of insufflation for the purpose." Thinking he could go a step further and apply the acid to the endometrium itself, he found that by means of a slightly curved vulcanite tube, somewhat larger than a No. 12 catheter, with a tightly-fitting rod or piston of the same material, the application could be safely made. The insufflator or tube is tightly filled for about two inches from its extremity by plunging the end into a vial or other vessel containing the acid and withdrawing the piston. When so filled the tube is introduced through the patulous cervix into the uterine cavity, which has previously been cleaned with a wire curette. "The piston is

pushed home and a stick of compressed boric acid is deposited in the uterus. By this simple means I have succeeded in curing quite a number of cases of this troublesome and intractable complaint, some of which had previously, both in my own practice and in that of others, resisted the usual routine caustic treatment. Judging by my own experience I should say that if this treatment be adopted as described, the most chronic cases of endometritis should yield to a dozen such applications at most, at intervals of three or four days."

After a review of these somewhat conflicting views and plans of treatment—which, while they constitute but a fraction of the methods to be found in the books and journals of the period, probably embrace the leading and most prominent ideas upon the subject—and having referred to the sure-cure, never-failing, well-authenticated plans of treatment practised by distinguished gentlemen who pursue a single and well-defined course of treatment in all cases with the single result of cure—in which I will modestly say I have but little confidence, I will proceed to give the line of local treatment that I am, as a general rule, accustomed to practise in these cases. While the curette, as has been said, is a blind instrument and capable in careless and incompetent hands of doing much mischief, yet for the removal of fungoid vegetations and adenoid degenerations from the endometrium it affords the surest, speediest and safest means as yet devised. I am accustomed to follow the curetting by an application of Churchill's tincture of iodine or diluted carbolic acid, and always precede the treatment by a careful washing out of the vagina and uterus with a solution of 1 : 1000 or 1 : 2000 corrosive sublimate, after the method of Dr. W. G. Wiley. In cases in which this treatment is not admissible, or in which it has failed to afford relief, my next reliance is in the electro-chemical action of negative galvanism in removing the vegetations, after the method of Apostoli. This is accomplished by introducing into the uterine cavity an electrode, insulated to near the point and connected with the negative pole of the battery, the other pole being connected with a large pad of moistened potter's clay, sponge or prepared cotton, placed over the abdomen. The time for the employment of galvanism should be from ten to fifteen minutes at each treatment, and the treatment should be repeated about twice a week. The strength of the current to be employed will largely depend upon the acuteness of the case and the susceptibility of the patient to electrical influence. The chronic cases always require the stronger currents. The dosage may be fixed at from ten to three hundred milliampères; the minimum is, in my judgment, too small to accomplish any results, and yet practitioners with much larger experience than mine have had to employ it. This line of treatment is free from many of the objections to other modes of treatment. It is cleanly, free from pain and exempt from danger. Unlike cauteries and escharotics, it can be limited in its influence and produces no deleterious effects upon the sound tissues; nor does it leave a raw and exposed surface, as does the curette, to absorb poisons and septic matters; while it removes the vegetations, it imparts renewed tone and vitality to the diseased organ.

DISEASES OF THE HIP-JOINT.[1]

BY ARTHUR J. GILLETTE, M.D.,
ORTHOPÆDIC SURGEON TO ST. LUKE'S HOSPITAL, VISITING ORTHOPÆDIC SURGEON TO THE UNIVERSITY DISPENSARY, ST. PAUL, MINN.

THE title of this paper, "Diseases of the Hip-joint," is used instead of "Hip-joint Disease," because the latter term is applied more generally to a tuberculous inflammation, although, with authorities, I am inclined to believe that tuberculous hip-joint disease always begins as a simple inflammation following trauma, and by inoculation subsequently becomes tuberculous. There are diseases of the hip-joint the origins of which, I am sure, are not due either to injury or to tubercle bacilli, but which are constitutional diseases with local manifestations.

I am prompted to choose this subject for two reasons:

First. At the onset, these cases always have the same clinical appearance as those of the more chronic, or of a true tuberculous nature, and in several instances my prognosis did not prove correct, although I am sure that my diagnosis was undoubtedly accurate as regards an inflammation of the hip-joint.

Second. On several occasions, when I gave a prognosis in cases of chronic hip-joint disease, the family physician informed me that, by rest in bed, and extension by weight-and-pulley, he had cured cases of hip-joint disease in a few weeks. Thus was strengthened my belief in an inflammation non-tuberculous in the beginning, but with subsequent inoculation—usually occurring before it is placed in the hands of the specialist, and hence running a chronic course, with effusions and rupture of the joint capsule. Dissection of the soft parts may follow by the effusion becoming purulent, because of the breaking down of the soft parts, or of infection following the opening. This emphasizes the most important feature in the treatment of hip-joint disease, viz., an early diagnosis—since I believe it is sometimes possible to check the progress of these cases before they become chronic or tuberculous.

---

[1] Read before the Inter-County Medical Society of Wisconsin, March 10, 1891.

The occurrence of peritostitis in the long bones, following scarlet fever, measles or typhoid fever, is not at all uncommon. Dr. Keen[1], of Philadelphia, has given a full account of all the bone-lesions following the continued fevers. He found 69 cases, of which 22 affected the head, 7 the trunk, 6 the upper and 42 the lower extremities. There were 37 cases following typhoid fever. As to the date of occurrence in 47 cases, 10 were within two weeks, 27 from three to six weeks, and 10 some months after the fever. Keen's explanation was that the earlier cases probably came from clot, and the later from enfeebled nutrition. He found that the periostitis arose spontaneously or as a result of slight injury.

V. P. Gibney[2] read an original article before the American Orthopædic Association, entitled "Typhoid Spine," in which the clinical aspect resembled very closely that of beginning Pott's disease. In this paper he reports cases of disease of the hip which bear a close resemblance to tuberculous hip-joint disease. One was that of a young lady, eighteen years old, convalescing from typho-malarial fever and suffering with acute pain in the hip. Any movement of the limb would excite cries of pain. She was not of an hysterical, but rather of a lymphatic temperament. Weight-and-pulley and a traction hip-splint afforded relief in less than a month. A few months afterward there was no lameness, pain, or reflex spasm, although, as compared with the other limb, there was some limit to the free range of motion. Dr. Gibney's conception of the pathology was a circum-articular lesion confined to the periosteum or ligaments. Another case was that of a boy aged thirteen. For four or five months after having had typhoid fever, while confined to his bed, he kept both limbs flexed on the abdomen, and during convalescence was unable to straighten them. He was poorly nourished, and quite unable to walk. The thighs were sharply flexed on the pelvis, the legs on the thighs, the heels touching the buttocks. Any attempt at motion of the right thigh caused reflex spasm.

At the meeting referred to all the members seemed to acquiesce in the views of the author, and many reported cases of joint-troubles occurring in their own practice, following acute severe fever, the exanthemata, etc.

There is still another constitutional affection that I believe accounts for many diseases of childhood, and which often manifets itself in the form of joint-disease. I refer to hereditary syphilis; and I would ask the general practitioners present: How many cases of acquired syphilis continue the treatment so long as you advise? Do they remain under your care after the initial sore is well? I have carefully questioned a number of fathers whose children I was treating for joint troubles, and have been somewhat surprised at the number who acknowledged that at some time previously to their marriage they had had suspicious sores. I am also aware that syphilis usually manifests itself by pemphigus of the hands and feet, various eruptions, a copper-colored discoloration of the skin, characteristic snuffles or coryza, stomatitis, laryngitis, etc., and that all these symptoms usually occur before the end of the first year; but there are well-authenticated cases of hereditary syphilis in which the disease did not make its appearance until the twentieth and twenty-fifth years.

Some time ago a patient, a child not quite two years old, was sent me from a neighboring town, exhibiting all the symptoms of double hip-joint disease, and with no history of an injury. The disease had existed in the left leg for some months longer than in the right. The parents gave me the following history: The child had always been remarkably healthy, well-developed and intelligent, never having had any eruptions, although the parents thought it had been troubled with "snuffles." The teeth appeared punctually, and the fontanelles closed early. About three months prior to my seeing the child the first symptoms exhibited were loss of sleep and night-cries. At times, if the left limb was handled a little roughly, the child would cry, but at other times this did not seem to produce the slightest uneasiness. From day to day it was observed that the child held the limb flexed and adducted; following this the right limb became tender, was soon flexed and adducted in the same manner, so that when I saw the child both limbs were adducted, both thighs were almost completely flexed upon the abdomen, and the legs flexed upon the thighs. In this position the child had been for a number of weeks, and in all my experience I have never, in any disease, witnessed a patient suffer such agony and excruciating pain. The slightest jar of the floor or bed would cause pain. When I saw the child, movement being so intolerable, the napkins had not been changed for a number of days. It was impossible to make an examination without etherization. Upon extension of the limbs there was the characteristic lordosis of the spine. After etherization this entirely disappeared. The left leg, in which the disease first manifested itself, was one quarter of an inch shorter than its fellow, although it appeared longer. This, of course, was due to the tilting of the pelvis. I applied a plaster cast to keep the joints quiet. A general practitioner, administering ether, called my attention to the gums and teeth, which had the

[1] Trans. of Amer. Orthopædic Assoc., vol. ii. "Typhoid Spine," by V. P. Gibney.

[2] Ibid., vol. ii.

exact appearance described by Hutchinson. The gums were of a highly congested, swollen and peculiar spongy appearance. The child had also a severe laryngitis. The immobility of the hips did not relieve the pain. After a few days I applied a weight-and-pulley, and the child was asleep before I left the hospital. The flexion was not overcome so rapidly as usual under this treatment, although the pain was almost completely relieved. I then began the administration of mercury, both internally and by inunction. From the very time that this was administered the child began to improve. In ten days or two weeks, every bit of pain about the hips had disappeared, the inflammatory condition of the mouth was completely relieved, and at the end of six weeks the little patient was apparently well. Six months have now passed, and the child has not had any local treatment for three months; the hips are freely movable in every direction, and the child, to all appearances, is in perfect health. This history, together with the fact that the father acknowledged he had suffered from a sore on his penis, proves conclusively that it was a syphilitic hip-joint, pure and simple.

Another case, I am sure you will agree with me, was undoubtedly syphilitic; it was referred to me by Dr. Sweeney, of St. Paul. The disease was of the right hip, in a boy aged seven years. There was apparent lengthening, but actual shortening; there was atrophy of the calf and thigh, but only slight tenderness; the leg was abducted and slightly flexed. The mother gave a history of the boy having had a similar attack four years previously. At that time the joint was very painful, and was put in a plaster cast; following this a peculiar eruption appeared, which puzzled the attending physician. A consultation was called and medicine given that caused the disappearance of the eruption, the symptoms about the joint immediately clearing up, and the child up to the present time seeming perfectly healthy. I applied the long traction-splint, and the mother, without consulting the family physician or myself, left for the country. I did not see the child again for three months, when I was called, and found the child, of course, in a very much worse condition than when I first saw it. The thigh was flexed, the joint exceedingly tender, and there was swelling all about the hip. I had, in fact, a typical picture of a tuberculous joint. I reapplied adhesive plaster and a splint, and advised rest in bed. I continued this treatment for about ten days, with but very little or no improvement. The mother called my attention to a peculiar eruption, which, she said, had appeared some time before, mostly on the upper part of the child's body. It was of a dull brownish-red color, with an ulcerated top, and varying in size from a pea to a nickel. At my request Dr. Sweeney was called, and he immediately placed the child under anti-syphilitic treatment. The child's general condition immediately improved, the aggravated symptoms about the joint disappearing as if by magic. I have since learned that from the habits of the mother she would be a very fortunate woman indeed if she had not at some time been infected with syphilis. The father was also immoral. The child is still wearing the brace, and I fear has now a tuberculous hip, although I believe the origin of the disease was due to syphilis. Without doubt, syphilis is a distinct causative factor of rickets, and it is clearly demonstrated that among children affected with hereditary syphilis tuberculosis is rife.[1]

A CASE OF PICROTOXIN-POISONING; WITH REMARKS.[2]

BY EDWIN B. SHAW, M.D.,
OF OSAGE CITY, KANSAS.

ON account of the infrequent use to which cocculus Indicus and its active principle, picrotoxin, are put, the intelligence of this Society will not be impugned by assuming that all its members are not familiar with the drug. A careful search has resulted in finding but five reported cases of picrotoxin-poisoning, two of which are open to doubt, so that the one about to be presented will be the sixth case on record.

Sometime during the month of October, 1890, by the courtesy of Dr. John W. Elston, then coroner of Jackson County, Missouri, I was permitted to witness a post-mortem examination in the case of a man dead after taking a concentrated tincture of cocculus Indicus.

A. H. N., fifty-one years old, a native of Germany, had been in poor health for ten years. About five years ago, when suffering from bronchial catarrh, he purchased, as he supposed, some wild cherries, which he requested a druggist to put in a half-pint flask, to be filled with brandy. Of this he, with two other members of the family, took teaspoonful doses at irregular intervals, without experiencing any untoward effects. The flask was then put away, and remained undisturbed and forgotten until about two weeks prior to the time of the man's death. At that time he took the flask, containing the dry berries, which he still supposed to be wild cherries, and had it filled with whiskey. Of this tincture he had been taking small doses for upward of a week. One morning, at about 10 o'clock, he took a considerable quantity from the flask, afterward complaining of feeling dizzy and sick at stomach. He excited vomiting by tickling the fauces, and expressed himself as feeling relieved, but in a few moments fell to the floor in a convulsion. Convulsions of a tonic

[1] Annual of Universal Medical Sciences, vol. i., 1890, No. 29.

[2] Read before the Eastern Kansas District Medical Society, at Topeka, Kansas, April 14, 1891.

and clonic character followed in quick succession, till death closed the scene. During the convulsive stage unconsciousness was complete. A period of thirty minutes elapsed from the time of taking the tincture till death ensued.

The post-mortem examination was made at 8 P.M. of the same day. Rigor mortis was marked. The body was excessively adipose. The abdominal walls were two and one-half inches thick. The lungs were healthy. The right was adherent throughout the chest. The heart was contracted in systole and empty, and perfectly healthy. The liver was fatty and enlarged. The spleen was flabby and friable, and normal in size. The kidneys were fatty and enlarged. The stomach was excessively dilated and empty; the mucous membrane was congested in spots. Unfortunately the brain and spinal cord were not examined.

To the credit of the pharmacists of Kansas City, be it said that the berries were sold by a speculator who had possession of and conducted the drug-store temporarily. One at all familiar with the appearance of the wild cherry and the fishberry could scarcely mistake the one for the other.

Dr. W. B. Thompson, of New York, has reported death, preceded by violent tetanic spasms, in a child six years old, following the application of a strong tincture of the fruit to the scalp. A case of fatal poisoning by cocculus Indicus is reported by Dr. Sozinsky (THE MEDICAL NEWS, November 3, 1883); another by Prof. Mitchell (*Therapeutics*, Philadelphia, 1850).

Blythe, in his work on *Poisons: Their Effects and Detection*, reports two cases of poisoning by picrotoxin. "In 1829 several men suffered after drinking rum impregnated with cocculus Indicus; one died, the rest recovered. In the second case a boy, aged twelve, swallowed some of a mixture used for poisoning fish, the active ingredient of which was cocculus Indicus; in a few minutes he experienced a sensation of burning in the mouth, with pains in the œsophagus and stomach, frequent vomiting and diarrhœa. A violent attack of gastro-enteritis supervened, with fever and delirium. Death took place on the nineteenth day."

The two cases recorded by Blythe are certainly not clearly established examples of picrotoxin-poisoning. In fact, the boy in the second case presented few of the symptoms of picrotoxin-poisoning. This leaves but three fatal cases, excluding the case just reported, that are indisputable cases of picrotoxin-poisoning.

Although of not much practical importance, yet a brief study of the natural history, physiological action, toxic effects and therapeutical applications of cocculus Indicus, with a report of the changes found post-mortem in fatal cases of poisoning, will not be entirely without interest.

Cocculus Indicus is a native of the Malabar Coast and of Eastern insular and continental India. "As found in the shops, cocculus Indicus is a roundish berry, somewhat kidney-shaped, about as large as a pea, having a thin, dry, blackish, wrinkled exterior coat, within which is a ligneous, bivalvular shell enclosing a whitish, oily, very bitter kernel. It is without smell, but has an intensely and permanently bitter taste. It bears some resemblance to the bayberry, but is not quite so large, and may be distinguished by the fact that in the cocculus Indicus the kernel never wholly fills the shell."

Picrotoxin, the only active principle that has been made use of in medicine, is poisonous. Given to dogs in doses of from five to ten grains, it produced death, preceded by violent tetanic spasms, which, according to Dr. R. M. Glover, are very similar in character to those produced by Flourens by section of the corpora quadrigemina and cerebellum, being attended with backward rotary movements and tetanic spasms. Dr. Crichton Browne, by carefully-made experiments, has shown chloral hydrate to be antagonistic to the action of picrotoxin; anæsthetics and all relaxing and motor-depressing agents are antagonistic to its convulsive action. The action of strychnine is very similar, but differs somewhat in the character of the resultant spasm. In strychnine-poisoning the spasm is of a tetanic character, and the action of the cerebrum is not suspended till shortly before death. In picrotoxin-poisoning, a feeling of drowsiness precedes the convulsions and increases to profound coma with their continuance; the spasms are of a tonic and clonic character, principally, however, clonic. Recent experiments seem to show that the poison acts on the spasm- and vagus-centres in the medulla, and on Setschenow's inhibitory centre. Boeber finds that the electrical reactions of the nerve and muscle remain unchanged, proving that the effect of the poison is expended upon the centre and not upon the periphery. Bartholow, with several other authorities, states that the heart stops in diastole, the cavities full, the capillaries at the periphery empty; while the post-mortem examination in the case reported disclosed the opposite. Bartholow also affirms that picrotoxin is non-irritant to the gastric mucous membrane. This is quite improbable, because it is almost certain to produce nausea and vomiting. A portion of the poison remains in the blood, as is shown by the fact that flies are poisoned by drinking the blood in a fatal case.

Cocculus Indicus has long been used in India to stupefy fish, in order that they may be caught. It has been put to the same use in this country and in Europe. No cases have been reported in which unpleasant results attended eating fish caught by this means.

An ointment made of the powdered fruit has long

been used by the laity to destroy pediculi corporis, and it is claimed to be quite efficient in the treatment of tinea capitis. Being a cerebro-spinal stimulant, cocculus Indicus has been used in the treatment of a large number of diseases, but being possessed of so little real value, it is now never used except as a local application for the destruction of vermin.

[Picrotoxin has been used as a substitute for strychnine, in cases in which strychnine was indicated. In combination with belladonna it has, in the hands of some, acted happily in controlling the night-sweats of phthisis.—Editor of THE MEDICAL NEWS.]

MEDICO-LEGAL CASES.

BY HENRY A. RILEY, ESQ.,
OF NEW YORK.

Murder and Matrimony.—The recent execution of Eyraud in Paris for the murder of Gouffe, and the sentence of his accomplice, Gabrielle Bompard, to imprisonment for life, have served to keep this case in the public mind, and physicians have good reason to remember it for the claim made by the woman that she was hypnotized at the time of the murder, and the offer made on the trial to put her again under such influences. The morbid regard for women who commit murder is one of the curious circumstances connected with crime, and it is said that an appeal has been made for the pardon of Gabrielle Bompard by a man who promised to marry her if freed from prison.

The same offer was made in the well-known case in New York of Mrs. Druse, who, aided by her children, killed her husband, chopped him up, and boiled him. Governor Hill was asked by many persons to commute the sentence, and among others by a man whose matrimonial inclinations were not disturbed by the fact that the first husband had been killed in a remarkably deliberate and cold-blooded manner. The Governor, however, refused to be influenced by any so-called humane appeals or by the matrimonial offer mentioned above, and Mrs. Druse had to suffer the penalty of her crimes.

The New York Morgue.—The New York Medico-Legal Society has recommended the placing of the morgue in New York City on a scientific basis, under the direction of a competent physician. The great advantage to be derived from the change will be the increased facilities for the detection of crime. The morgue at present is managed in a haphazard sort of way, and many abuses are charged against it.

Weak Eyes in Children.—The last Legislature of New York passed a law as follows: "Should any midwife or nurse having charge of any infant in this State notice that one or both eyes of such infant are inflamed or reddened at any time within two weeks after its birth, it shall be the duty of such midwife or nurse so having charge of such infant to report the fact in writing, within six hours, to the health officer or some legally qualified practitioner of medicine of the city, town, or district in which the parents of the infant reside."

Health Legislation in Congress.—A large number of bills, more or less important, always fail of passage at the short session of Congress on account of the lack of time, and this is the case even when there is no special opposition to them and they have no political bias. Some of these measures related to the public health, such as the Paddock Pure Food bill, which attempted to put restraints upon the adulteration of articles of food when transported from State to State. The Conger Lard bill suffered the same fate, but this was not so desirable a measure as the other, and had been repudiated by some of the associations interested in health legislation, while the pork-packers were said to favor it. Bills for the inspection of live cattle and hogs, when exported, and of the dressed products of the same, together with an inspection of the vessels themselves, failed to become laws. However, a bill was passed prohibiting the introduction into the United States of any adulterated article of food or drink.

Is Cremation Popular?—The papers chronicle an occasional cremation of well-known persons, but it would seem that the general patronage of the crematories has not increased much within the past two or three years. The latest instance of the kind is that of Miss Emma Abbott, whose body was cremated at Pittsburg on February 17th. A short time since, a resident of Brooklyn named Meyer died and directed that his body should be cremated and the ashes thrown to the winds from the top of the statue of Liberty in New York harbor. The papers report that the direction was complied with.

Manufacturing Establishments as Nuisances.—Cases involving the question of what constitutes a nuisance which can be abated by injunction, or for which money damages can be awarded, are growing more numerous as the conditions of society become more complex. Many of the cases, and perhaps the majority, turn on points of health, and a recent action in New York is of this character. The statement of the facts shows the necessity for some legal interference. It says the nuisance is "an establishment for the manufacture of paving and roofing material, where the owner heats and boils asphaltum and other substances, which emit offensive and unwholesome gases and stenches which render the air in the locality of the plaintiff's dwelling foul and unwholesome; that by reason thereof plaintiff and his family have been put to inconvenience, discomfort, sickness, and damage; have been obliged to keep the doors and windows of their dwelling closed day and night, even in hot weather; that their food has been impregnated by such gases so as to be disagreeable to the taste and unwholesome; that fine sand and soot, and other matter engendered in the defendant's factory, have been blown into the plaintiff's dwelling to such an extent that plaintiff and his family have been deprived of the use of the front room; that plaintiff and his family have been deprived thereby of the ordinary and comfortable use and enjoyment of said dwelling and premises; that the plaintiff's wife and family have been made sick by said smells, sand, and stenches, and one of the plaintiff's daughters died from sickness caused or aggravated thereby; that plaintiff has been deprived of the services of his wife and children by reason thereof, and has been com-

pelled to pay for medical attendance on account of such sickness." The Court held that these circumstances fully warranted an action for damages.

COMPLETE OUTWARD DISLOCATION OF THE RADIUS AND ULNA AT THE ELBOW.

BY A. B. ISHAM, M.D.,
OF CINCINNATI.

IN THE MEDICAL NEWS of Sept. 30, 1882, I reported a case of complete outward dislocation of the radius and ulna at the elbow, appending a list of all the published cases of that accident that had appeared in this country up to that date—eleven in all, including my own case. To these should have been added a case reported by Dr. S. R. Towne, of Enfield, Mass., in the *Medical Record* of May 8, 1880, but which was overlooked because it appeared under an incorrect heading and was so indexed.

Recently another instance of this casualty has been met with. About midnight of Sept. 3, 1889, Mr. ——, a German, aged fifty-seven years, of spare, slight figure, while making his way home down a steep hill, lost his balance and was precipitated into a gully. His outcries aroused the dwellers in the neighborhood, and a telephone being convenient medical assistance was soon at hand. Complete outward dislocation of the radius and ulna at the right elbow-joint was found. The articular surfaces of all the bones concerned in the formation of the elbow-joint could be plainly felt. The finger could be placed in the olecranon depression of the humerus, the coronoid process of the ulna being posterior and against the external condyle of the humerus. The forearm was freely movable like the "sweep" of a flail. The increase in the breadth of the joint transversely, noted in my former case, was here particularly marked, together with the increase in the antero-posterior thickness to the outer side of the articulation, from the posterior displacement. At the inner side the internal condyle was very prominent, and there was great thinning antero-posteriorly, corresponding to the articulating surface of the humerus. There was also a right lateral deviation of the common tendon of the triceps. It may have existed also in my first case, but if so it escaped observation.

With the aid of a stout German, who held the humerus fixed, reduction was without much difficulty accomplished. I strongly extended and flexed the forearm with the left hand, while at the same time making forcible traction in a direction downward, inward, and backward with the right hand over the upper extremities of the radius and ulna anteriorly. After a few efforts in this way the double shock was felt—feeble but none the less agreeable—that announced that the bones had glided back into their proper positions. The joint was fixed with angular pasteboard splints, the forearm being held at a right angle and supported by a sling. After three days the splints were removed, and while the arm was still to be carried in a sling, gentle movements of flexion and extension, to be gradually increased in force, were directed to be practised several times daily. The result has been very gratifying, as there is no stiffness of the joint, flexion is perfect, and extension is almost complete. There being such an extensive tearing up of the structures of the joint with this luxation—the anterior and posterior and both lateral ligaments in all probability being ruptured—it is important to prevent the formation of strong adhesions by movements begun early and often repeated. In my former case, although early movement was recommended, the patient through fear of physical pain did not carry out the directions, and some adhesions formed, interfering to some degree with extension, although for this form of dislocation the outcome was unusually good and the arm is about as useful as it ever was.

In both my cases the dislocation was first backward, as shown by the position of the coronoid process of the ulna upon the posterior surface of the external condyle of the humerus. In all cases of direct fall where the arm is thrown out as a support, dislocation is commonly backward, that being the direction in which the force is most naturally distributed at the elbow-joint. A true outward dislocation would likely occur only where the weight of the body is suspended by the arm, as in dragging or being caught up by machinery, or in any event where the forearm is twisted outward, the weight of the body sustained from it being in the opposite direction. Such complete outward dislocation of the bones of the forearm at the elbow is unquestionably of rare occurrence. But if complete outward dislocations, in whatever way they may be brought about, may be included, then the accident, while it is not frequently met with, is not nearly so rare as it has been represented. This conclusion has been reached not only from my own experience but from letters received from physicians in different parts of the country after the publication of my first case, in which, after giving an account of cases they had met with, the opinion was expressed that the instances were not nearly so uncommon as the published list of cases would indicate, but, unaware of their rarity, that there had been failure on the part of the profession to report them.

The special and general works treating of dislocations devote but little space to outward luxation of the forearm bones at the elbow, and the points particularized as having diagnostic significance are the mobility of the bones entering into the joint and the ability to distinguish the articulating surfaces of the radius and ulna externally and the humerus internally. So far as I have seen, no mention is made of the peculiar appearance of the parts, the broadening of the joint, the thinning antero-posteriorly at the inner side, and the thickening in the same direction at the outer side, presenting to the eye a figure so striking that, with almost unerring accuracy, a diagnosis might be predicated upon it.

The case of Dr. Towne, previously alluded to, one case reported by Oscar Leedom in the *Med. and Surg. Reporter*, June, 1883, one case reported by Dr. W. C. Stick in THE MEDICAL NEWS for March 3, 1883, together with the case the subject of this paper, bring the whole number of cases reported in the United States, to this time, to fifteen.

THE one hundred and twenty-fifth annual meeting of the Medical Society of New Jersey was held at Long Branch, June 23 and 24, 1891. Many availed themselves of the cordial invitation extended to members of the medical profession and their families

ORIGINAL LECTURES.

HEMIPLEGIA.

Abstract of a Clinical Lecture delivered at the Bellevue Hospital.

BY W. H. THOMSON, M.D.,
VISITING PHYSICIAN.

GENTLEMEN: The diagnosis of hemiplegia is easy to make, because the symptoms are well defined and usually unmistakable. From the standpoint of treatment, hemiplegia is scarcely a nervous disease, but rather a pure accident, resulting from disease elsewhere than in the nervous system. Our topic for to-day is, How can we prevent this great calamity?

The symptoms vary greatly, according to the seat of the accident. For instance, this man tells us that he first felt dizzy while standing, and that the dizziness was quickly followed by weakness and inability to stand. After reaching the hospital his mind was confused for only a short time. No headache had preceded the attack, and there were no other symptoms. This second patient says that, previous to his attack, there was some headache, which was not continuous. The first symptom was failing memory—he forgot words and could not perform mathematical tasks. This was followed by loss of power in the right arm and, one week later, in the leg, and then he was unable to use words.

There are three common forms of hemiplegia. The commonest follows disease of the bloodvessels, in which the coats of the arteries are rendered brittle by changes that are most readily appreciated by examination of the radial and temporal arteries. This form is called vascular hemiplegia. The form next in frequency is due to syphilitic disease, manifesting itself by changes within the skull, which are either vascular or extra-vascular. The latter are more common, and affect the brain or its coverings. These changes consist in the formation of syphilitic new growths in different parts of the brain, most commonly in the meninges. This extra-vascular form of hemiplegia is usually characterized by headache, preceding, accompanying, and frequently following the hemiplegia. In the vascular variety the hemiplegia is due to a syphilitic change in some of the arteries. It differs from the other vascular form of hemiplegia in that the arteries of the whole body are not affected, the deposits occurring here and there in the bloodvessels. This condition is not so often followed by rupture of an aneurismal dilatation as is the more usual form of vascular disease. As the syphilitic deposit gradually encroaches upon the lumen of the bloodvessels the disease shows itself somewhat slowly. In the third variety of hemiplegia the accident arises from the plugging of a bloodvessel in the brain by an embolus.

The differential diagnosis of these three varieties is of considerable importance; it is for this reason that so much time has been devoted to an examination of the arteries. This should be done quite independently of the condition of the pulse. The fingers should be placed upon the radial artery, the wrist slightly flexed, and the sensation conveyed by the bloodvessels, independently of the pulse, carefully noted. If the artery can only be detected by its beat, the vessel is healthy. If, on the other hand, the artery feels like a cord, either smooth or rough, the vessel is diseased. The vessel may feel so rough that as the finger is passed up and down, the vessel feels like a string of beads. Do not examine the pulse until after you have inquired into the condition of the artery; simply counting the pulse is but a small part of your duty.

There are six elements of the pulse to be noted, and these may be divided into two classes—*i. e.*, the cardiac and the vascular elements, dependent upon the heart's action and upon the condition of the bloodvessels respectively. The three cardiac elements are frequency, strength, and rhythm. The three vascular elements are size, quality, and length. The frequency of the radial pulse depends in nearly all cases upon the frequency of the heart-beats. The only exception to this arises when the calibre of the arteries is so much reduced by disease that the heart has great difficulty in driving the blood through them. This extra work causes hypertrophy of the heart; after a time the hypertrophied heart undergoes degeneration and dilates. When this dilatation becomes decided, the heart may have only sufficient force to propel the blood into the more distant arteries at every other beat. The strength of the pulse depends upon the force of contraction of the left ventricle of the heart. The rhythm of the pulse applies to its regularity or irregularity. By size is meant whether the pulse is full or small; if large, the artery is relaxed; if small, it is contracted. The size of the arteries is incessantly varying. By the length of the pulse is meant the time required for the pulse-wave to pass under the finger. If the artery, arterioles, and capillaries are all relaxed, so that the blood can pass rapidly through them, the pulse is short; but if there be much peripheral resistance, the pulse is long. The quality of the pulse is a most important element; it refers to the compressibility of the pulse. To determine this element, three fingers are placed upon the artery; lifting two, the third is pressed upon the bloodvessel; it is noted whether or not this manœuvre easily stops the current of blood so that it cannot be appreciated when the other fingers are again applied lightly to the vessel. If this stoppage cannot be readily accomplished, it is evident that the pulse is incompressible or hard.

Let us now see what are the practical applications of this knowledge. In case of phthisis the pulse is very compressible, but in Bright's disease or in gout it is not. Pressure sufficient to control the pulsation in phthisis is not at all adequate to control the pulse in Bright's disease. The difference in the compressibility of the pulse is particularly noticeable in two diseases that are often confounded—*i. e.*, rheumatism and gout. In the former the pulse is compressible, in the latter it is incompressible. So great is this difference that I believe, blindfolded, I could by this means distinguish between cases of rheumatism and gout.

When called to a case of hemiplegia, the first question that should suggest itself is: To what extent are the arteries diseased? The answer will influence both the prognosis and the treatment. The gravity of accidents should always be mitigated by an element of prevention, and the duty of prevention rises in importance with the seriousness of the accident. No accident can be more serious than that of paralysis; hence, the question of prophylaxis demands serious consideration. In the first

patient the artery can only be felt on the diseased side by its throb; the vessel is like that of one in health. On the sound side it can just be felt, because on this side the circulation is a little stronger. The case is either one of syphilis or of embolism, as a result of which there is hemiplegia; the patient is not old enough to show vascular changes of a non-specific character; he has not used alcohol immoderately, nor is he the subject of Bright's disease. The temporal arteries are not tortuous or prominent; this also leads us to think that the general arterial system is sound. The hemiplegia, then, is most probably due to syphilis or to embolism. Neither the history nor the physical examination points to cardiac disease, so it is not likely that there is embolism. I am, therefore, led to suspect that the hemiplegia is of syphilitic origin. The patient denies having had headache, but this is not incompatible with the theory of a syphilitic endarteritis; besides this, the hemiplegia came on gradually—first in the arm and then, about one week later, in the leg. The other patient is older, and evidently has a higher degree of vascular disease than the first patient, but by no means enough to account for his condition. His pulse is quite compressible; such a pulse is not likely to be present in a case of vascular hemiplegia. The reason for this is found in the physical conditions that determine the compressibility of the pulse, and on these the prophylactic treatment is based. It is the rule in all cases of vascular disease that the small arteries are more extensively diseased than the large ones. A hard, incompressible pulse indicates that the bloodvessel is much distended, owing to the difficulty of forcing the blood into the arterioles. If the force of the heart's action be suddenly increased by excitement, it is easy to understand that the coats of the bloodvessel might yield, forming an aneurism which, under similar conditions, might eventually rupture.

There are two ways in which the lumen of an artery may be narrowed, viz.: (1) by vasomotor contraction and (2) by disease of the arterial coats. By a nervous impression the calibre of the arteries may be so narrowed that no blood can get through. Fear gives rise to a sudden blanching of the face and a violent, tumultuous action of the heart from the consequent increase in peripheral resistance. If the heart is not equal to this emergency sudden death is the result. In this way death from drowning often occurs in good swimmers, by suddenly throwing upon the heart extra work, owing to the sudden contraction of the arteries all over the body, as a result of a plunge into very cold water. Similarly, if the heart be unable to furnish an adequate supply of arterial blood to the muscles, muscular cramp is produced.

Whatever causes irritation of the vasomotor nerves may produce an over-full artery just as perfectly as though the artery itself were diseased. Vascular disease leading to hemiplegia is in a large majority of cases due to a slow chronic interstitial nephritis, represented by the red, contracted kidney. Cases of this kind are characterized by the presence of a moderate amount of albumin in the urine, often entirely absent for days at a time. The urine is of low specific gravity and pale in color, from the deficiency in the coloring-matter that should have been removed from the blood. Under the microscope you will find almost constantly hyaline or granular casts, showing that structural changes are going on in the kidney. The bloodvessels are irritated by the excrementitious matter that is not removed by the kidneys, and the result is a chronic endarteritis. An analogous change is also very often present in the veins. Bright's disease also has a great tendency to produce "nervous storms," sudden changes in the conditions of the vasomotor nerves, that, in ordinary language, are spoken of as a "rush of blood to the head." Even in health, the urine excreted after a hearty meal is of much higher gravity and contains much more urea than the urine excreted before the meal; this is due to the fact that there is a special vasomotor arrangement for all the excretory apparatus of the body, that provides for more active secretion when an addition has been made to the system; hence, when a full meal is taken extra work is thrown upon the kidneys, in order to preserve the balance of the circulation, and if the kidney is too much damaged to do this extra work, the vascular system may suffer serious derangement. It is on this account that so many cases of hemiplegia or apoplexy occur just after a hearty meal. We see, then, how a proper understanding of the relations of the vasomoter system, and its bearing upon vascular disease, may enable us to prevent the development of the diseased conditions just described, and so avert that great calamity, hemiplegia.

TUBERCULOUS ULCERATION OF THE SKIN AND GLANDS.

A Lecture
delivered at the Philadelphia Hospital.

BY ERNEST LAPLACE, M.D.,
PROFESSOR OF PATHOLOGY AND CLINICAL SURGERY IN THE MEDICO-CHIRURGICAL COLLEGE; SURGEON TO THE PHILADELPHIA HOSPITAL.

I bring before you a little child, with what seems to be an ulceration of the neck. It behooves us to establish a diagnosis, because the child is very ill, and we must act at once. I call your attention to the temperature, which, in the morning, is about 99°, or a little lower, and in the evening rises to about 103°, or a little higher. The pulse varies between 120 and 140. The child has a delicate appearance, and we find the neck swollen and a certain amount of ulceration. We have to determine the nature of the pathological condition. We must do something for the child, for, in spite of treatment, the temperature remains elevated. What is the cause of this elevation of temperature? Should we operate and remove the tumor regardless of the temperature? Is this ulceration the cause of the elevation? If it is, we must operate notwithstanding the elevation of temperature, for not until the disease is removed will the fever disappear.

Let us examine the case. Here is a mass extending from the angle of the jaw almost to the clavicle, a large tumor, on the surface of which the skin has ulcerated. Between two ulcerations is a bridge of skin, which furnishes a clue to the diagnosis, because the condition of the skin, with underlying ulcerations, is the same as in the case of lupus which we saw, and for which you should always look when you suspect tuberculosis. Coming from this ulceration is a grumous, cheesy substance,

which consists of epithelial cells that have undergone fatty degeneration. Examining the location of this tumor, we find that it exists over the region of the cervical glands; that these are enlarged, and that they are not freely movable on the subjacent structures. Because a tumor is not freely movable, you need not necessarily conclude that there is an infiltration of the underlying structures by the disease process. You know that in the differential diagnosis between carcinoma and benign growths we palpate to determine whether the growth is movable or immovable. If movable, it is a sign that it has not thrown roots (if you will pardon the expression) into the subjacent tissues. If immovable, it is a sign that it has thrown its roots into the underlying structures. In this case the tumor is only slightly movable. This is not due to infiltration; the tumor is simply bound down by the tissues about it. This has been of gradual development, and the child has not been well at any time since the process began. It first grew as a hard lump, softened, and then ulcerated, and is an example of tuberculosis of lymphatic glands.

Aside from this I draw your attention to a few points: Blonde children are more disposed to develop tuberculosis or scrofulosis than brunettes; fair-haired, blue-eyed, light-skinned children are more likely to develop one or the other of these diseases.

This child was brought here a few days ago by the mother, and as we have not seen the latter since, we cannot operate now, as we had intended. In the meantime we will give the child tonics, in order to put it in the best possible condition. As a rule, in these cases, not one or two, but a great many glands are affected. As they are deeply situated around the carotid artery and jugular vein it becomes a delicate operation to remove the glands completely, usually necessitating careful dissection from the clavicle nearly up to the angle of the jaw, and this requires time and attention.

The next case is a patient who also has an affection of the glands, and here I want to differentiate these two affections. This man was struck by a rock, and as a result received what is called a contused lacerated wound of the scalp. Not a sharp, incised wound in which the bloodvessels are cleanly cut and no harm is done to their structure, but a contused wound from a blunt instrument, as a result of which the bloodvessels are bruised and neighboring cells destroyed. Such a wound will not heal by first intention, because the cells have been destroyed outright. Wounds of this kind are dangerous, because a certain amount of tissue is of necessity destroyed, and there is sloughing of the parts; the wound may also be easily infected, and there may be other trouble to contend with. There may be infection of the parts and the attendant results: general septicæmia or pyæmia, or, what is of less importance and what has taken place in this case, a local infection which has been intercepted by the lymphatic glands in the neighborhood. This man came to the hospital without being able to tell us much about the wound. He said he suffered from a lump on the side of the neck. It would be a mistake to operate in such a case without considering the possibility that the tumor might have some connection with the contused and lacerated wound of the scalp, though on the opposite side of the head.

Inasmuch as this growth has developed after the reception of the wound on the head, and inasmuch as it presents certain acute symptoms (being red and painful), we know that there is taking place in that gland a certain acute process; what is it? Nine-tenths of all acute processes of this kind are either directly or indirectly due to the local development of the streptococcus pyogenes aureus, the local germ of suppuration, with which we must become acquainted just as intimately as we are with the alphabet, for we never get an abscess or any suppuration without the presence of these germs, at least when the trouble has been produced by an infection. Later I shall have occasion to speak to you of aseptic pus, in which there are no germs, which is produced by chemicals, such as corrosive sublimate, and which, acting on the skin, produce pus without germs; but all these acute processes, resulting from local infection, contain this germ, and we must learn all about it. Here we have a swelling, a tumor, which is painful, but not well defined. We do not find it as a mass under the skin, but sloping in all directions. It is painful not only at its summit, but also in the neighborhood thereof. Not only is the gland below affected and the seat of an inflammation, but the tissues about it are more or less infected. Recognizing that the process is gradually extending, we know that the cause is still present, and that unless it is removed only one thing can follow, and that is local suppuration.

Through the wound in the scalp germs have found entrance, and received by the gaping mouths of lymphatics, they have travelled down to this gland, which has strained the lymph and retained the germs. Here in the gland, just as in the test-tube in the pathological laboratory, a colony develops at the expense of the substance upon which the germs grow. Blood comes to the part, white blood-corpuscles are killed; they collect as pus and an abscess results. This will occur unless one thing be done. If we wish to stop the growth of the germs, we must enter the parts with an agent which will destroy them. Agents of this kind are called antiseptics. We must open the wound in the scalp, carefully cleanse it, removing all dead tissue, and apply antiseptic dressings, which will not only destroy the germs now present, but also prevent other germs from entering the system. That being done, our attention must be directed to the infected gland. How must we treat this? Please remember that you must never apply a poultice under such conditions as here exist. Never, because you have a swelling, apply a poultice. What do we accomplish with a poultice? We bring the affection to a "head," which means promoting the development of germs and the formation of pus, which is the reverse of what we wish to do. Therefore, do not put on heat and moisture, which would supply the favorable conditions for the development of germs. We must place there moisture, if you wish, but moisture in conjunction with something which, when it penetrates the skin, will destroy the microorganisms; the inflammatory process being stopped, no abscess will be formed. Therefore the treatment is the continuous local application of an antiseptic; not warm, of necessity, but cold. Generally, the modern poultice is antiseptic. Instead of simple warm water, with the flaxseed meal, use a 1 to 1000 solution of corrosive sublimate, or a 1 to 2000 or 3000 of the acid sublimate, and keep the poultice applied to the parts. The flaxseed meal

retains the moisture and retards evaporation. The antiseptic solution will penetrate the parts, causing contraction of the bloodvessels and destruction of the germs, and will check the inflammatory process going on.

CLINICAL MEMORANDA.

BROMOFORM AS A TOPICAL APPLICATION.

BY SOLOMON SOLIS-COHEN, M.D.,
OF PHILADELPHIA.

I HAVE recently employed bromoform in a severe case of ozæna as a topical application to the nasal mucous membrane after thorough cleansing with hydrogen dioxide. The absence of the severe local reaction anticipated, together with the extraordinary success of the measure, not only in destroying the odor but in controlling the morbid secretion, encouraged me, after preliminary trial upon my tongue and pharynx, to use the same agent as a topical application to tuberculous and other ulcers of the larynx, after cleansing with hydrogen dioxide. Here the agent seemed to exert analgesic as well as disinfectant properties, as pain was relieved and healing apparently promoted. The agent being extremely volatile, the immediate effect is transient, and I have, therefore, followed the application of bromoform with insufflation of iodoform in powder. While this somewhat obscures the therapy, yet the effect was better than when iodoform had been used without bromoform in the same cases. This preliminary note is published at this time to induce further trial and report by others.

219 S. 17TH ST., JUNE 15, 1891.

MEDICAL PROGRESS.

Diphtheria.—LÖFFLER, RAUX and WACHSMUTH contribute in the *Jahrbuch für Kinderheilkunde* the following:

Patients with diphtheria should, of course, be isolated, and placed in a room containing only the barest necessaries in the way of furniture. All the surroundings of the patient must be freed from bacilli by the use of superheated steam. Children who have had diphtheria must be kept out of school at least four weeks. The resisting powers of the bacillus of diphtheria are such that it can retain its vitality in large and moist membranes for from fourteen to sixteen weeks. Löffler is not quite certain that diphtheria can be transferred from animals to human beings, but he believes that the bacillus may locate upon unbroken mucous membrane; hence, for prophylactic purposes, the necessity of the use of mouth-washes for children. A 1 : 10,000 solution of sublimate may be used for this purpose. He does not believe that climate has so much to do with the danger of contracting this disease as bad hygienic conditions. His conclusions are:

1. The diphtheritic spore is the cause of the disease, and is to be found in the diseased mucous membrane.

2. So long as any traces of diphtheritic exudate remain, the bacillus or spore may be found, and in some cases it may be found after such traces have disappeared.

3. In dry membranes the spore will retain its vitality four or five months; hence the necessity for disinfecting everything which might come in contact with the diseased excretion. This may be done by boiling, or by subjecting to steam at 100° C. The floors should be washed with a 1 : 1000 solution of sublimate, and the walls rubbed with bread.

4. The bacilli retain their vitality longer in moist than in dry surroundings, hence moist and dark rooms are favorable for their development.

5. The bacillus of diphtheria thrives very well outside the body, at a temperature of 20° C.; it also grows very well in milk; hence the necessity for careful regulation of the milk business.

6. The diseases which resemble diphtheria in certain animals are not caused by the bacillus that causes diphtheria in human beings, nor will the former give rise to diphtheria in human beings.

7. The etiological identity of diphtheria in cats with that in human beings has not been proven.

8. Lesions of the mucous membrane favor the development of the bacillus of diphtheria, but are not essential thereto.

9. The influence of certain meteorological factors in determining the spread of diphtheria has not yet been positively shown.

Roux affirms that the diagnosis of diphtheria cannot be bacteriologically determined with certainty until the middle of the second day of the disease.

In regard to treatment: the use of antiseptic irrigation must be continued until the bacilli have disappeared from the mouth. Such treatment should continue from eleven to fourteen days. The furniture of the sick-room and all the surroundings should be disinfected with boiling water or steam, the patients should be isolated, and antiseptic irrigation should be continued as long as any trace of angina remains.

Wachsmuth recommends the following prophylactic precautions:

1. The yard contiguous to the house in which diphtheria has prevailed should be disinfected.

2. Places in which dust accumulates should be disinfected with carbolic acid, and the dust collected and carried away.

3. Means for producing perspiration are among the most efficient agents in the prophylaxis of diphtheria. —*Archives of Pædiatrics*, May, 1891.

Opening of the Mastoid Process.—HEIMAN says: Throughout Europe the mastoid process is opened with the hammer and chisel. I also operate principally in the same manner, and until lately only with the chisel, as this method is the least dangerous, the wound remaining clean during the operation, and easily kept under observation. A few months ago the surgical department of the hospital received a trephine à crémaillère for operations on the bone. It is precisely the same trephine which Pasteur uses in his investigations on animals. I was advised to use the instrument for opening the mastoid process. I have done so twice, and once the operation was done by the consultant of the surgical department. No conclusions can be drawn from these three operations, and I shall therefore confine myself to giving the impressions which this method of operating made upon me:

1. The removal of the compact portion of the mastoid

process, especially when it is thick, is much more rapid than with the mallet.

2. The edges of the wound need not be smoothed off after the operation.

3. The different size of the trephines permits the formation of a wound in the bone of the desired size.

4. Shock, which can be avoided with the hammer only to a certain extent, is entirely obviated with the trephine.

5. The depth of the wound can be graduated with exactness.

An inconvenience, however, lies in the fact that the wound can only be inspected when the trephined piece of bone has been lifted out, which in sclerosed bone may not be easy. For operating in the mastoid cells the sharp spoon is sufficient. The true value of this method can be ascertained only after a large number of operations, performed by various surgeons. I believe that in opening the cranial cavity for the evacuation of cranial abscesses the trephine is to be preferred even to the broad chisel, because in removing a large piece of bone with the latter instrument we must operate a long time with it, so that the shock must be quite severe, which with the trephine is not the case, even when applied at several adjacent spots.—*Archives of Otology*, April, 1891.

Rheumatic Hyperpyrexia Without Cerebral Symptoms.—ROSENTHAL (*Deutsche medicin. Wochenschr.*, No. 11, 1891) reports a case of rheumatism in a male, thirty-one years old, that for a week ran the usual course, the temperature not rising above 102.2°. There was sleeplessness, which resisted treatment with morphine and chloral. On the eighth day the temperature suddenly rose to 104°, and the breathing became bad. From 104° at 5 P.M., the temperature rose to 105.8° at 10 P.M., to 108.9° at 12.45, and to 110.5° ten minutes later. Death took place at 1.30 P.M., when the temperature reached 111.6°. Sweating, which earlier had been rather profuse, gave way, with the setting in of the hyperpyrexia, to a hot, dry skin. Consciousness was retained until within an hour and a half of death, with entire absence of cerebral symptoms.

A Case of Multiple Sclerosis with Intention-tremor in the Face.—COHN (*Deutsche medicin. Wochenschr.*, No. 13, 1891) reports a case of multiple sclerosis, in which intention-tremor of the muscles of the face was present, and in which the differential diagnosis from paralysis agitans was, to say the least, exceedingly difficult. The patient was a woman of thirty-four, without neurotic family history, save, perhaps, for tremor and impairment of gait in the mother. Following a labor, some difficulty in walking was noticed, and later, tremor in the left arm on attempted movement. Speech was said to have been affected. The condition became aggravated after a subsequent labor. The tremor advanced to the right arm, and there were pain and stiffness of the neck. The facial expression was fixed; muscular movements were performed tardily, and were accompanied by tremor of the eyelids and lips. The chin-reflex was emphatic. Tremor of the upper extremities continued during rest, but was more marked when attempts at movement were made. The fingers were fixed as in writing, the middle, ring and little fingers of the left hand being in constant motion. Change from the sitting posture to the erect was performed slowly and was attended with tremor of the extremities. The gait was propulsive; the forearm was flexed on the arm, the hand on the forearm. Passive movement of the rigid parts caused pain. There was spontaneous pain in the back; also restlessness, readiness of fatigue and sense of heat. The right half of the body was weaker than the left. In favor of the diagnosis of paralysis agitans were the constant tremor, the weakness, the rigidity, the facial expression, the position of the hands and arms, the propulsive gait, the pains, the sense of fatigue and the restlessness, the sense of heat, without elevation of temperature; in favor of multiple sclerosis, the age of the patient and the intensification of the tremor by attempted movement. In the further course of the disease, nystagmus, upon both lateral and vertical movement of the eyeballs, developed. As to the possibility of an association of paralysis agitans and multiple sclerosis in the same patient, Cohn could find in literature but one case. In this an autopsy revealed the presence of multiple sclerosis, the symptoms of paralysis agitans only having been present during life.

The Insane in the United States.—According to the *Abstract of Sanitary Reports* of the United States Marine-Hospital Bureau, May 29, 1891, the total number of insane persons treated in both public and private institutions during the year 1889 was 97,535, while during the year 1881 there were 56,205 treated, showing an increase in the nine years of 41,330, or 73.53 per cent. This percentage of increase, when compared with the percentage of increase of population in the last decade, namely, 24.86, does not indicate an increase in the proportion of insane persons to population, but rather a great increase in the amount of asylum accommodation provided, and a willingness on the part of the public to make full use of all the facilities thus provided. The figures for the actual number of insane in the United States cannot be determined until the work of eliminating all duplicate reports of cases has been completed.

In 1889 there were 38 private institutions in the United States for the treatment of the insane, 25 located in the North Atlantic States, 12 in the North Central States, and 1 in the South Atlantic States.

The ratio to each 1000 inhabitants of the whole United States of the insane in public institutions is 1.46, and, including both public and private institutions, 1.56.

Water Supply and Tapeworm.—The citizens of Glasgow glory in their matchless water supply taken from Loch Katrine, but they are subject to periodical scares regarding alleged dangers by its use. Once it was the assertion that the water was too soft and rickets would become prevalent. Next it was the risks of contamination that would arise from the little steamers that ply the loch in the summer season, and the inevitable excretal discharges that would imperil the health of the water-consumer. Both of these suspicions lost their force when the passage of events disclosed no evil results. The latest alleged danger is a peculiar one, and exists in the fact that the trout of the lake are infested with tapeworm, but this very unsavory suggestion has been shown to be a groundless cause of alarm, by an investigation made by Dr. J.

B. Russell, the medical officer of health, and by Professor Young. These investigators report, that while it is undoubtedly a fact that trout suffer from the parasite as has been stated, yet they do not consider that there is special risk that tænious disease will be propagated through the channel of the water supply. On the contrary, it is their conviction that the records will show that there is less rather than more of tapeworm complications among Glaswegians—as Scott would term them—when compared with the residents of other localities in Scotland.

The Results of Removal of the Breast.—As a result of partial or total removal of the breast in one hundred patients, in the treatment of tumors of various kinds, between 1880 and 1889, TERRILLON (*Bulletin Gen. de Thérap.*, May 15, 1891) has arrived at the following conclusions: the gravity of the operation is insignificant; recurrence seems to be the rule when the axillary glands are involved in the disease; when mammary tumors are malignant or of a mixed character, the entire gland and involved lymphatic glands should be removed if recurrence takes place; the operation may be repeated once or several times, especially if primary union of the skin can be secured; by this means the condition of the patient is ameliorated, the drain attending ulceration is obviated and the unfavorable course of the disease seems to be retarded.

The Arterial Tension in Phthisis.—MARFAN (*La Méd. Moderne*, May 21, 1891) has observed that, in cases of phthisis, with or without fever or treatment, the arterial tension is, from the outset, lowered. With active fever or the approach of death, the tension falls still lower.

Œdema of the Larynx in the Course of Bright's Disease.—MENDEL (*Annales des Malad. de l' Oreille*, etc., May, 1891) reports the case of a man, fifty years old, who for twenty years had noticed transitory swelling of the feet, hands, scrotum, and face. Albumin was found in the urine. On one occasion, he was suddenly seized with difficulty of speech and respiration. The symptoms became so aggravated that suffocation was feared. On examination, the velum, especially the anterior pillars, the uvula, the left pharyngo-epiglottic fold were found red and swollen, the epiglottis being displaced to the right. The throat was sprayed with carbolized water and a milk diet was prescribed. In the course of a few days the œdema had disappeared. On the posterior surface of the epiglottis a small, acuminated tumor, probably the result of chronic inflammation of the mucous membrane, was now noticed.

The Treatment of Pulmonary Tuberculosis by Vaccination.—DOCHMANN (*Medizina*, No. 6, 1891) reports three interesting observations made by Vinogradof in 1883–84.

In a woman of twenty-four, with pulmonary tuberculosis in the second stage, an attack of uncomplicated variola was followed by local and general improvement.

In a woman of twenty-six, also in the second stage of pulmonary tuberculosis, vaccination, repeated several times, and a single interstitial injection of cow-vaccine were followed by improvement of the general condition and of that of the lungs.

A student in the second stage of pulmonary tuberculosis, who was vaccinated eleven times, at the end of several months presented increase in weight and improvement in the general and local condition.—*La Méd. Mod.*, May 21, 1891.

Treatment of Burns and Scalds.—Having observed the good results obtained from the application of rubber cloth to wounds upon which skin has been grafted, as well as to the surface from which the graft has been taken, Dr. O. P. Barber, of Saginaw, Michigan, has suggested a similar procedure in the treatment of burns and scalds. The burned surface is freely irrigated with carbolized water, all necrotic tissue removed and blebs punctured. Then the entire wound is snugly wrapped in rubber tissue that has been kept in a carbolized solution. Over this is placed absorbent cotton and a bandage. The advantages claimed for the dressing are that it relieves pain, that it does not adhere to the wound, that it excludes air, and that it protects the granulations, whilst preventing their exuberant growth.

Artificial Quinine.—TRIMAUX and ARNAUD (*Tribune Médicale*) have succeeded in producing quinine synthetically by the addition of cuprein (a base obtained from the Remijia pedunculata, a shrub or tree of Brazil belonging to the natural order of Rubiaceæ or Cinchoneæ) carefully purified and freed of all traces of quinine, to a theoretical quantity of sodium dissolved in methylic alcohol. The mixture is for several hours gradually heated with an excess of iodide of methyl. The result is quinine or methyl-cuprein. By a secondary reaction iodomethylates of quinine also form, similar to those furnished by natural quinine. Conducting the process in a closed vessel, the di-iodomethylate of quinine is obtained, the properties of which are identical with those of natural quinine. If the iodide of methyl be replaced by the chloride of methyl, so that a mixture of a molecule of cuprein, an atom of sodium, and a molecule of chloride of methyl results, which is dissolved in methylic alcohol and heated for twelve hours in sealed flasks at 212°, one obtains free quinine.—*Les Nouveaux Remèdes*, May 24, 1891.

The Puerperium in Malarial Districts.—From a study of forty-six cases in which malaria existed during the puerperium, ABELIN (*Archives de Tocologie*, March, 1891) concludes that malaria does not affect the progress of labor, that it does not perceptibly influence normal uterine involution and that it is questionable if it affects the secretion of milk. It is the cachexia due to chronic malaria, rather than the malaria itself, that predisposes to the occurrence of post-partum hemorrhage. Acute intermittent fever, however, appears to predispose to the occurrence of hemorrhage and to a prolongation and increase in the quantity of the sanguinolent lochial discharge. The appearance or reappearance of malarial manifestations after labor is frequently observed; but labor is often followed by a disappearance of the signs of malaria which had been present in the later months of pregnancy. It is difficult to be certain that febrile attacks in the puerperium are malarial in character; it is first necessary to exclude local causes of high temperature in the genital organs and in the breasts. Malaria does not appear to be more intense in the puerperium

than at other times and if promptly treated it does not constitute a serious puerperal complication.—*Edinburgh Medical Journal*, June, 1891.

Transmission of Tubercle Bacilli from Mother to Fœtus.—BIRCH-HIRSCHFELD and SCHMORE (*Beitr. zur Pathol. Anat. u. zur Allgem. Pathol.*, 1891, p. 429) have reported the case of a young woman, who, early in her first pregnancy presented signs of phthisis, to which she succumbed in the seventh month. Immediately after the death of the mother, the fœtus was extracted by Cæsarean section. On post-mortem examination tuberculosis was detected not only in the lungs but also in other organs of the mother. Although the fœtus had been alive shortly before the death of the mother, it was dead when removed. The chest was at once opened, but nothing abnormal was found in the lungs. The surface of the abdomen was washed with a solution of bichloride of mercury and the cavity opened with sterilized knives. No tubercles could be seen. Small bits of the liver, spleen, and kidney were, with antiseptic precautions, placed in the abdominal cavities of two guinea-pigs and a rabbit. One of the guinea-pigs died in fourteen days. The other was killed at the end of six weeks, and many tubercles were found in the peritoneal cavity. The rabbit lived for three months. On its death many tubercles were found in the liver and lung. Tubercle bacilli were found in the umbilical cord and in the blood of the umbilical vein of the fœtus.—*Supplement to Brit. Med. Jour.*, June 6, 1891.

A New Method of Staining the Bacilli of Leprosy and Tuberculosis.—UNNA (*Monatshefte für prakt. Dermatol.*, June 1, 1891) proposes a new method of staining the bacilli of leprosy and of tuberculosis. By carrying out the following procedures the bacilli are stained brownish-red upon a colorless background.

1. Stain for five minutes in an aqueous borax-methylene-blue solution (1 : 1 : 100).
2. Wash in water.
3. Iodize for five minutes in a 5 per cent. solution of potassium iodide, containing a crystal of iodine.
4. Wash in absolute alcohol until blue clouds are given off.
5. Differentiate in creasol from a few seconds to half a minute.
6. Fix in rectified oil of turpentine.
7. Mount in balsam (a solution of yellow resin in oil of turpentine).

The method may be modified in the following manner for staining tissues:

1. Stain for five minutes in an aqueous solution of borax-methylene-blue (1 : 1 : 100).
2. Wash in water.
3. Iodize for five minutes in a 5 per cent. solution of potassium iodide.
4. Wash in absolute alcohol.
5. Differentiate from ten to thirty seconds in a solution of equal parts of glacial acetic acid, absolute alcohol and ether.
6. Harden and smooth by immersing in absolute alcohol.
7. Fix in rectified oil of turpentine.
8. Mount in balsam (a solution of yellow resin in oil of turpentine).

Good results may be obtained by omitting the fifth and sixth manipulations.

Remedy for the Stings of Insects.—As the result of personal experience, DR. WM. A. TERRY (*Dietetic Gazette*, June, 1891) recommends the application of fresh urine in the treatment of the stings of venomous insects. The application is soon followed by a subsidence of the pain and a disappearance of the inflammation. The effectiveness of the result depends upon the speediness of application. It is thought that urea is the active agent in the antagonism.

Pambotano—A Substitute for Quinine.—DR. A. E. ROUSSEL presented to the Philadelphia County Medical Society a report of eight cases of malarial fever, in the treatment of which an alcoholic elixir of pambotano or calliandra houstoni was used. Ninety grammes of the elixir, representing seventy grammes of pambotano, were administered in four equal doses, in hot, sweetened water or tea, in the course of twenty-four hours, preferably on an empty stomach. The results, while encouraging, were scarcely so satisfactory as those reported by other observers. Used in influenza, typhoid fever and phthisis, no influence upon the course of the diseases could be observed.

Saturnine Hemichorea.—GIRAT (*L'Union Méd.*, May 7, 1891) reports the case of an artisan, whose occupation necessitated the handling of red lead. He suffered with habitual constipation, and there was a blue line at the margin of the gums. One night he was suddenly awakened by a sense of formication, cramps, and irregular involuntary movements, beginning in the right leg and extending to the right arm. The intelligence was preserved; there was no fever, no paralysis. The breath was fœtid, the abdomen tender but not retracted. A sedative was prescribed, and an enema administered. On the following day the movements continued; in addition, attacks of clonic convulsions occurred. The abdominal pain increased in severity; nausea and bilious vomiting set in; the right half of the anterior abdominal wall felt hard, as if the muscles were spasmodically contracted. The enema was repeated. In the course of a few days the symptoms gradually and completely subsided.

Tuberculous Peritonitis in a Child, Cured by Abdominal Section.—ALEXANDROFF (*Wratch*) reports the case of a girl, three years and nine months old, whose father had died of tuberculosis. Diarrhœa had existed for two months; the abdomen was enlarged; dulness on percussion and fluctuation were elicited; the temperature ranged from 100° to 102°. Abdominal section was performed, the fluid evacuated, and drainage provided. A bit of peritoneum, examined microscopically, contained tubercles and giant-cells. The wound healed by primary union. The fever, however, persisted, and the fluid reaccumulated. The operation was repeated, the abdominal cavity being irrigated with a solution of boric acid. The fever now declined, the patient began to increase in weight, and eventually recovered.—*Revue Obstét. et Gynécol.*, April, 1891.

THE MEDICAL NEWS.

A WEEKLY JOURNAL OF MEDICAL SCIENCE.

COMMUNICATIONS are invited from all parts of the world. Original articles contributed exclusively to THE MEDICAL NEWS will upon publication be liberally paid for, or 250 reprints will be furnished instead of payment. When necessary to elucidate the text, illustrations will be provided without cost to the author.

Address the Editor: GEO. M. GOULD, M.D.,
1004 WALNUT STREET,
PHILADELPHIA.

Subscription Price, Including Postage in North America.

PER ANNUM, IN ADVANCE . . . . . $4.00.
SINGLE COPIES . . . . . 10 CENTS.

Subscriptions may begin at any date. The safest mode of remittance is by bank check or postal money order, drawn to the order of the undersigned. When neither is accessible, remittances may be made, at the risk of the publishers, by forwarding in *registered* letters.

Address, LEA BROTHERS & CO.,
Nos. 706 & 708 SANSOM STREET,
PHILADELPHIA.

SATURDAY, JULY 11, 1891.

THE INTERNATIONAL HOMŒOPATHIC CONVENTION.

IN reading the reports of this Convention, just held at Atlantic City, one is persistently struck by the indifference of the delegates and speakers to what would naturally seem their chief duty and concern. They did not appear to have much interest in disease, but only concern for the progress of homœopathy and in medical legislation. After two days of self-glorification, came a practical-appearing paper on "Backache." The essence of the paper and of the subsequent discussion appears to be that backache is due to knots in corset-strings, to "a non-woollen trouser waist-band," to buttons, whalebones, heavy silver watches, etc. In diagnosticating this wonderful disease we are directed thus: "After practising usual crural and abdominal reflexes (!) direct the patient to arch the back and rest on occiput and heels; request the subject to walk in a straight line, eyes shut, and at the same time play an imaginary fiddle. Some special curves disappear on patient 'dressing up' vertically and trying to look square." In the report as to the progress of homœopathy in foreign countries, we are assured that in Germany "the clouds of ignorance are being dissipated by homœopathy." In England the "slow progress" is charged to "British conservatism." "Good news" comes from China, Australia, South America, etc. "In Moscow and St. Petersburg the homœopathic physicians are pulling by far the greater number of silver door-bells." The quack, Count Mattei, upholds the flag in Italy. In America "homœopathy has received its full perfection like the other sciences."

"Insurance Discrimination" was the subject of a report "received with marked interest." Personal letters, written to the presidents of twenty-seven life-insurance companies, as to their discrimination against homœopathic physicians in the choice of examiners, elicited only eleven answers. "Sixteen entirely ignored the request." The few replies are highly amusing. The question is dodged by most of the presidents; one can picture the wicked smiles that probably played about the grim visages of the writers as they dictated their answers. The officer was absent whose duty it was, or who "was competent," to answer the inquiry. Others aver they "never discriminate;" but the lecturer asserted most positively that the companies issue secret orders against the appointment of a homœopathist. Only one company met the question with a manly answer: "We appoint regular physicians because they are the best educated."

In considering "the ethical basis of the separate existence of the homœopathic school," Dr. Crouch contended that the "allopath" has "no more actual science than the Indian medicine man who essays to cure by blowing feathers and beating tom-toms." This slightly extreme judgment was deemed too lenient, and was reinforced by adding that the "allopathic" principle of practice is "not one whit in advance of that of prehistoric man, nor in any way changed except by the unfortunate doctrine of the illustrious GALEN."

At odd, rare intervals a live medical subject was sniffed at, much as a puppy plays with a bumble-bee. One speaker did actually advise the trial of antiseptic methods in puerperal fever. Bacteriology was ogled and snapped at, but at once there was a turning of tail and a ridiculous retreat. The bumble-bee excites curiosity, but is dangerous. "Materia medica day" (*sic*) promised a closer grappling with facts. Alas! we are again floated away on glittering generalities concerning "Civil Government and the Healers of the Sick"—in other words, our States and the general Government must not let the "allopath" have any cherries unless the homœo-

pathic boys are allowed in the same tree. There was one practical subject announced: "A Comparison of Therapeutic Methods based on a Study of Arsenic." "At his own request the speaker was excused from reading it." He was manifestly out of place—possibly, like the young neophyte of Doré's great picture, he was startled at the mediæval mummery and the kind of folk he had got among.

The fourth and fifth days also passed in much vaporous talk about homœopathy instead of about disease, an occasional slight diversion taking place as to hay-fever, appendicitis, etc. A paper on "Orificial Surgery" was noteworthy, and through her representative Philadelphia did not fail to make her voice heard in favor of "the liquor from corned beef and cabbage for cases of cholera infantum in babes as young as ten days." On the sixth day, the glorious subject being still unexhausted, "The Progress of Homœopathy in the World" was again discussed with perfervid rhetoric. But the topic nearest the heart ended all—the everlasting one of *medical legislation.*

Such a sketch as we have given, when read post-mortem, may appear like the caricature of a malignant, partisan enemy, but it is not half so absurd as the more extended report given by the best daily papers. It is strange that such things can happen here, and now. Representatives of what purports to be a great medical school for healing disease come from all parts of the civilized world, and their whole week's work is about their sect, not about disease. In all this great convention not a word is said concerning phthisis, that annually carries off about two thousand of every million inhabitants; not a word uttered by these men showed that they cared that each year, in this country alone, some forty thousand die of diphtheria. Did these "physicians" manifest any concern as to typhoid fever, to which three or four per cent. of all deaths are due? As to diseases of the digestive organs that slay their thousands? As to diseases of the circulatory and nervous systems that slay their tens of thousands? As to diseases of the respiratory system that slay their millions? Should one sit down and enumerate the percentages of deaths from each disease that afflicts humanity, and then foot them all up, it would be found that during these seven days not a paper was read nor a discussion held upon the diseases that cause about ninety-nine per cent. of the deaths of the world. And yet these people can find dupes who think there is either sense or seriousness in such a school of medicine!

However, could aught else be expected of men who almost worship one who took as his distinctive tenets of medical faith the most outrageous absurdities that can be imagined? Take away these travesties of nonsense and nothing is left of Hahnemannianism. What, in brief, simple English, are these articles of the Hahnemannian homœopathic creed?

1. That disease is immaterial, spiritual, its causes not perceptible to the senses, and that no attempt need be made to find them out.

2. That all chronic diseases, except syphilis and sycosis, are due to the itch.

3. That the more you weaken or dilute a drug with water the stronger it becomes, until all that is necessary is simply to smell the most diluted mixture—"even though you have no smeller."

4. That to put out a fire you must add fuel to it—to cure a disease give a medicine that would cause it.

Is it to be wondered at that men who pretend to believe such idiotic drivel call themselves the "new school," when they know that the real new school of medicine, with its instruments of precision, its bacteriological research and its earnest scientific zeal, should long ago have burned as in a garbage furnace *their* very "old school?" It is they only that could find satisfaction and self-excuse in dubbing as "allopathists" those who would as willingly, and could as justly, be called popcornopathists. It is only such who would pretend to practise "dynamization by attenuation," whilst secretly and hypocritically giving "allopathic" doses of "allopathic" drugs.

The moral of it all is, that to indulge in good-humored contempt of these pestiferous doctrines and doctrinaires, to show them mercy, to be indifferent to them, to compromise and play politics with them, is to be poltroon and renegade in the face of one's duty to science and humanity.

THE REPORT OF A MEDICAL EXAMINER FOR LIFE INSURANCE.

THERE are few things that suggest more significant and valuable lessons as to public health, disease, heredity, etc., than the report of a conscientious and skilled medical examiner for a well-managed life insurance company. That such reports may yield the best lessons, the examiner must be one

that does not blindly follow the statistics of others' gathering, nor mechanically carry out old-established rules. For example, to extend the system of averages over areas where diverse conditions prevail hides from view the operations of special causes and conceals the lessons of special prophylaxes. Such dangers are carefully guarded against in the perspicuous summaries of his work made by the medical examiner-in-chief of that well-known organization, the Royal Arcanum. Of 5855 applications submitted to him in 1890 by presumably healthy men, 1302 were rejected. This large proportion of rejections arouses a somewhat startling inquiry as to the general state of physical health of the average American citizen. In a membership of 105,397 the deaths were 925, or a death-rate for the order of 8.77 per thousand. As to the relative death-rates of different States, taking the average of the past five years, we learn that Arkansas was, by a large plurality, the least healthful of all the States, the number of deaths per thousand members of the order having been 20.8. Georgia comes next in order, 13; then Virginia, 11.9; and the District of Columbia, 11.1. The rate of North Carolina was 10.9; Tennessee, 10.6; Maryland, 9.9; Missouri, 8.7; Pennsylvania, 8.6; New York, 8.5; Massachusetts, 8.1; Ohio, 7.8; New Jersey, 7.6; Michigan, 7.5; Indiana, 6.5; Illinois, 6.4; Wisconsin, 6; Rhode Island, 5.4; and Connecticut, 4.9.

The deaths from acute affections of the lungs were this year far in excess of those of previous years, a result undoubtedly due to the pneumonia following influenza. La grippe is charged with at least 87 of the 932 deaths. DR. SEAVERNS divides these deaths into three classes: 1, those occurring from the direct influence of the disease (47); 2, those in which previous disease was aggravated by influenza (20); 3, those in which the person succumbed to other disease for which la grippe prepared the way (20). The mortality was again the greatest in the Southern States. As to the deaths from phthisis, Rhode Island has the place of honor, not a death from this cause occurring among over 1000 members. Wisconsin and Indiana come next with a rate (from phthisis) of only 0.4 per thousand deaths; that of Pennsylvania, Massachusetts and Tennessee being about 1, while Virginia, North Carolina, Michigan and New Jersey have a rate of about 1.8 or 1.9. Notwithstanding the great caution in excluding doubtful risks, it is a somewhat sad commentary on medical prevision to learn that 54 out of the 932 deaths occurred within a year after the entrance examination had been passed. The report is full of interesting facts that we regret we may not recapitulate.

WEEKLY COST OF CARE OF THE INSANE IN AMERICAN ASYLUMS.

FROM the late report of the Committee on Lunacy of Pennsylvania we learn that the per capita weekly expense of maintenance in the principal State Hospitals was (1890) as follows: Harrisburg, $3.81; Danville, $3.31; Norristown, $3.61; Warren, $3.26; Dixmont, $4.31—the average being $3.66. This was for an average aggregate hospital population of 4879. In New York the average cost for 1907 insane in four hospitals was $5.09. In Michigan, three hospitals, 2382 patients, $3.84. In the Government Hospital at Washington, with 1475 inmates, the cost was $4.23. In Wisconsin, the cost was $3.76; in Indiana, $3.96; in Massachusetts, $3.60; in Connecticut, $3.20; in Minnesota, $3.15; in Ohio $3.39; and in Illinois, $2.95. The great lessening in the cost of maintenance is in some cases due to the self-supporting labor done by the chronic insane. It is a strange inhumanity that frequently, and indeed generally, supports thousands of idle people, when their labor rightly and judiciously applied would be a blessing to the one laborer who is supported and to the other outsider who is taxed for the supporting. Let the able ones be put to work.

PREDISPOSITION TO DISEASE IN THE NEGRO.

FROM an analysis of the diseases of 430,466 colored patients treated by the medical department of the Bureau of Refugees from 1865 to 1872, DR. REYBURN, late Surgeon U. S. Volunteers, makes some valuable comparisons as to the alleged predisposition of the African race to certain types of disease. Comparison is made with the diseases (22,053 cases) of white refugees. Among the negroes, there were 152,141 cases of remittent and intermittent fever, and the conclusion is reached that no difference in susceptibility to these fevers exists between the colored and the white people of the Southern States. In like manner the relative statistics disprove the statements commonly made concerning the extreme liability of the colored race to scrofula and pulmonary tuberculosis. The deaths from typhoid fever were 951, or nearly 25 per cent. of

the cases treated, the high mortality being dependent upon the intestinal lesions. The death-rate from diarrhœa and dysentery was also high, which DR. REYBURN ascribes to the ignorance of the colored people of the laws of hygiene and the use of improper articles of food. The colored freedman and the white refugee alike succumbed quickly to epidemic cholera. Under every variety of treatment about one-half of the patients died.

The remarkably small number of cases of delirium tremens among the negroes is charged by DR. REYBURN to "the want of development of the cerebral hemispheres." "Delirium tremens is preëminently a disease causing disorder of intellection, and hence the continued abuse of alcoholic drinks in the negro race is more apt to produce epileptiform convulsions or mania than delirium tremens."

The conclusion is reached that the negro race does not withstand the attacks of acute inflammation, such as pneumonia, nor do they recover from long-continued illnesses, such as typhoid fever, so well as the white race; but, on the other hand, the negro's power of repair after injuries and following surgical operations is believed to be superior to that of the white.

THE HEALTH OF COLLEGE STUDENTS.

FROM statistics kept at Amherst College during the last thirty years it is found that the percentage of illness among seniors has been nearly one-fourth less than among freshmen. It is also shown that from 1861 to 1865 the average yearly loss of time of the students from sickness was 2.18 days, while from 1885 to 1889 the average was about one-fifth less, or 1.75 days. In the first period the deaths were 6.1 per cent. of the number graduating, while from 1885 to 1890 the percentage was only 3.4. These interesting results are traced to the system of physical training and exercise introduced by DR. EDWARD HITCHCOCK, thirty years ago, as a part of the regular curriculum. If the data were to be had it would be an instructive study to compare these statistics with those of other colleges where systematic gymnastics is not compulsory, or where the systems are entirely different in character.

THE INFLUENCE OF SMOKING ON PHYSICAL DEVELOPMENT.

FROM the records of the senior classes of Yale College during the past eight years, the non-smokers are proved to have decidedly gained over the smokers in height, weight and lung-capacity. All candidates for the crews and other athletic sports were non-smokers. The non-smokers were 20 per cent. taller than the smokers, 25 per cent. heavier and had 66 per cent. more lung-capacity. In the graduating class of Amherst College of the present year, those not using tobacco have in weight gained 24 per cent. over those using tobacco, in height 37 per cent., in chest-girth 42 per cent., while they have a greater average lung-capacity by 8.36 cubic inches.

SOCIETY PROCEEDINGS.

THE GYNECOLOGICAL SOCIETY OF CHICAGO.

Meeting of February 20, 1891.

W. W. JAGGARD, M.D, IN THE CHAIR.

DR. HENRY T. BYFORD presented two specimens of fibroid tumors of the uterus removed by operation.

DR. E. C. DUDLEY reported a case of extra-uterine pregnancy which had extended five weeks beyond term and in which the fœtus was dead. Abdominal section, with the removal of the fœtus, was followed by recovery on the part of the mother. The adherent placenta was permitted to remain.

DR. J. H. ETHERIDGE reported two cases in each of which a multilocular cyst of one ovary by pressure occasioned degenerative changes in the other.

DR. JOHN S. CLARK read a paper entitled

FIFTY YEARS' EXPERIENCE IN OBSTETRICS.

In his experience he had attended, in round numbers, 3500 cases of childbirth. He had never seen a woman die in actual labor and had never left undelivered a case to which he had been called.

During the first fourteen years of practice he had attended 700 cases without encountering a placenta prævia, an arm presentation, or eclampsia; two face presentations were the most troublesome complications. He could only recall three cases in which he had used the forceps. He had had but one death, thirty hours after labor, from uræmic poisoning.

In the next sixteen years he must have had 1500 cases. During this time he encountered his first arm presentation—a midwife's case, who had dallied with it all day—but kind Nature, as she most always does in preternatural presentations, had withheld hard pains, and the turning was easy and quite successful.

Of eight cases of placenta prævia which he had attended, in but two had he delivered living children.

He recalled seven cases of arm presentations; in all turning was easily performed, but the death-rate of the children was high; either three or four died.

In the following twenty years he attended more than 1300 cases, of which a disproportionate number was instrumental. He had never seen a woman die in childbirth. He did, however, have three deaths within twenty-four hours after labor—one at six hours, from exhaustion following a breech presentation; another in a case

of arm-presentation; and a third in a case of tedious labor in which the patient died twenty-four hours after delivery. All three were simply cases of exhaustion. These, together with the case of uræmic poisoning and four other cases—one of which was a most interesting case of pyæmia, in which death occurred thirty-five days after delivery, and that was worthy of a long and full report—are the only cases of death incident to gestation or delivery that he could recall in his whole experience.

Twice he felt compelled to practise perforation—once in a case of frontal presentation, when, for some cause, the forceps would not hold, and a second time in a case of vertex presentation, with the face in the hollow of the sacrum.

He could not recall a single death or a serious injury following a forceps delivery. He soon learned to make early applications, but always gave Nature a good chance.

He had been peculiarly fortunate in regard to hemorrhages after delivery, the life of the patient being endangered in but one case. But once in his entire experience was a patient seized with convulsions during, before, or after labor.

He had two cases of encephalic monsters.

He could recall having seen but two cases of spina bifida.

Earlier in his career he had used anæsthetics in labor much more frequently than now. He fails to see their value in most cases, and only uses them when from any cause the os is very tender and sensitive, or when about to perform a painful obstetrical operation.

He had used ergot quite frequently ever since he began to practise midwifery, at first only in inertia, viz., when pains were feeble; of late years for other purposes, principally for hemorrhages. In but a single case had he seen harm result from its use.

He had delivered a few times from above the superior strait.

It is astonishing how long a time, occasionally, will elapse, after the death of the fœtus, before it is cast off. Dr. Clark had a case in which three months elapsed between the death of the fœtus and its expulsion. In case of abortion hemorrhage is easily controlled by a well-fitting tampon; no harm results from its use. If the ovum has been retained for a long time and hemorrhages occur, an effort should be made to remove the ovum; for, the ovum once turned out, the bleeding ceases. He had known the ovum to be retained for twenty-eight days, and finally discharged with very little show, perfectly inodorous and unchanged. If decomposition takes place, the discharges offensive, the os open and the cavity of the womb easily reached, the ovum should be removed; but if the external os is tightly closed he would hesitate to invade the sanctuary on which Nature has written, "No admittance." Having seen a large number of cases of retained decomposing ova which came away or were absorbed without harm to the patient, he had little fear as to the result.

Address Wanted.—Will Dr. W. Clark, who sent a communication to THE MEDICAL NEWS, kindly send us his address?

CORRESPONDENCE.

CHANGES RELATIVE TO MEDICAL STUDENTS IN THE NORTHWESTERN UNIVERSITY.

To the Editor of THE MEDICAL NEWS,

SIR: Under the presidency of Henry Wade Rogers, LL.D., many changes are being made in the arrangement of work and in the management of the Northwestern University. Some of these are of enough interest to physicians to warrant the use of a little space in professional journals.

In the College of Literature a course has been arranged especially for those intending to study medicine. Since the spring catalogue was issued several changes have been made in this course and more are promised. It consists in a thorough course in organic and inorganic chemistry, mechanics, heat, sound, light, electricity, mathematics, German, French, psychology, logic, rhetoric, botany, biology, bacteriology, geology, zoölogy, and osteology. The biological work is in charge of Prof. Chas. B. Atwell, Ph.M., a graduate of Syracuse University. He is an enthusiastic student himself and he has the reputation of inspiring his scholars. He is spending his summer vacation with the German masters. His methods are such as to make the use of text-books secondary and incidental. This course is the result of a gradual evolution, but as a distinct course it was established last year.

From its foundation the Medical Department of the University has been known as the Chicago Medical College; the law school has been called the Union College of Law; the school of pharmacy has been the Illinois College of Pharmacy, etc. In the future these various titles will be dropped and the schools will be known simply as the Northwestern University Medical College, Dental College, School of Pharmacy and College of Law.

The Woman's Medical College has heretofore had an independent existence. Negotiations are now being completed to make this school also a department of the Northwestern University and to be known as the Northwestern University Woman's Medical College. It will remain as distinct from the old medical school as from the law school.

The courses in the medical schools have been lengthened to four years, but the preparatory course in the Literary College may apply as one year in the medical schools.

A University Council has been organized, consisting of the President of the University and the dean and one member of the faculty of each school. To this council are referred matters of mutual interest to the different colleges.

A fund of $150,000 is being raised to endow three chairs in the medical college. A new laboratory building is being erected in Chicago for the departments of medicine, pharmacy and dentistry.

A school of technology is not far distant in the future, since $150,000 has already been secured for that purpose.

For many years the school of medicine has encouraged its students to take a thorough preparatory course by

offering free lecture fees to those who have finished the studies of the freshman and sophomore years in the College of Literature, or the special course for medical students in the same college.

During the year fifty-two scholarships in the College of Literature have been established, corresponding with the number of State Senators in Illinois. To each State Senator is given the privilege of sending one student upon such scholarships.

Since a large proportion of the colleges of the University are in Chicago, it was ordered at the recent trustee meeting that the word "Evanston" be taken from the seal. In the future, in the place of independent commencements for the different schools there will be one commencement held, probably in the Auditorium, Chicago.

The Chicago Medical College was the first medical school in the country to adopt a graded course. In the past her classes have not been so large as those of some other schools, but the character of her work has been second to none, in the West at least. With the additional hospital advantages which the new Wesleyan Hospital will furnish, there is no reason why the Northwestern University Medical Colleges should not continue to do good work. Respectfully, H. B. H.

EVANSTON, ILL., JUNE 29, 1891.

CHICAGO.

DR. JOHN H. RAUCH'S resignation as Secretary of the State Board of Health of Illinois was tendered and accepted at the meeting of the board held in this city on June 30th. The letter of resignation was as follows:

W. A. HASKELL, M.D., President Illinois State Board of Health—Doctor: I beg to tender my resignation of the office of Secretary to which I was reëlected at the last meeting. While I must stipulate that this resignation shall take effect as of this date, I do not wish to embarrass the board in any manner and shall be happy to furnish the fullest information concerning the complicated details of the Secretary's office and to discharge without compensation any of its duties that the board may indicate for a reasonable period. Accept for yourself personally and convey to the other members of the board my thanks for the uniform courtesy and generous support which has been accorded me, since the first organization of the board in 1877, as your President and Secretary. Yours very truly,

JOHN H. RAUCH.

After reading the communication to the board, President Haskell said he presumed the members were sufficiently aware of the circumstances which had led Dr. Rauch to take this action. He would, therefore, refrain from any expression of opinion, but he desired to pay a tribute to the services which Dr. Rauch had rendered to the medical profession, to the cause of sanitary science, and to the lives of the citizens not only of Illinois, but also of the country at large, for nearly half a century. His name was known and honored on both sides of the Atlantic. Through his untiring energy, devotion to lofty ideals, and unhesitating self-sacrifice the board had come to be recognized as the most important factor in all questions of medical education, public sanitation, and the interests of the entire nation. He would not for the present express what he felt sure were the sentiments of his colleagues, but advised the board in accepting the resignation to appoint a committee to prepare an adequate expression of the high appreciation and esteem in which Dr. Rauch was held by the members and of their regret at his resignation.

A committee, consisting of Drs. Newton, Bateman, Clark and Ludlow, was then appointed, with instructions to publish its report before the next meeting of the board.

The quarterly report of the Secretary stated that the public health had been unusually good, contagious diseases having been rare.

It was decided to revoke all licenses of physicians convicted of malpractice. Charges having been brought against Dr. S. E. McCreary, of Peoria, for unprofessional and dishonest conduct, he was summoned to appear before the board to show cause why his certificate should not be revoked. He appeared by attorney, asked further time, and the case was postponed until the next meeting.

A petition was received from the Indiana Eclectic Medical College asking that their diplomas issued prior to May 15, 1890, be recognized. The petition was granted.

Dr. A. L. Clark was appointed to represent the board at the International Congress of Hygiene and Demography to be held in London next August.

NEWS ITEMS.

Washington State Board of Health.—The first Board of Health and Bureau of Vital Statistics in the new State of Washington, composed of five members appointed by the Governor in compliance with an Act of the Legislature approved March 7, 1891, was organized June 8, 1891.

The Cincinnati Lancet-Clinic.—The editorial chair of the Cincinnati *Lancet-Clinic*, made vacant by the transfer of Dr. Culbertson to the *Journal of the American Medical Association*, has been filled by the selection of Dr. A. B. Richardson—Dr. J. C. Oliver and Dr. L. S. Colter being associate editors.

The School of Medicine of the University of Texas —At a meeting of the Regents held last week at Austin, steps were taken to put the medical branch into operation next October. It was determined to arrange for eight chairs, with salaries affixed as follows: Three at $3000 each, viz., physiology, chemistry and surgery; four at $2500 each, viz., anatomy, materia medica, obstetrics and gynecology, and practice of medicine; one at $2000, viz., pathology and bacteriology. But two of the above were filled. Dr. H. A. West, of Galveston, was elected to fill the chair of Practice of Medicine; and Dr. J. F. Y. Paine, of Galveston, the chair of Obstetrics and Gynecology. The board also determined to have a three years' graded course, a session of seven months, and to require an entrance examination.

The medical branch of the University is located at Galveston. The State has nearly completed a handsome building at a cost of $70,000. Upon the block adjoining

is the Sealy Hospital, the gift to the State of Mrs. John Sealy. This hospital is a fine building. Its clinical material is controlled by the college faculty. Funds were appropriated for the equipment of the various laboratories. These facts are mentioned for the information of those who may seek the vacant chairs. An election to fill these vacancies will take place in Galveston the latter part of August next. For further information and details applicants may address Dr. Thos. D. Wooten, President of the Board of Regents, Austin, Texas; or Dr. T. C. Thompson, Galveston, Texas.

Ohio State Medical Society.—The Ohio State Medical Society held its forty-second annual session at Sandusky, June 18, 19 and 20, 1891. Dr. W. J. Conklin, of Dayton, presided, and Dr. G. A. Collamore, of Toledo, acted as Secretary.

The President read an address on Molière and the Doctors. Dr. H. J. Herrick, of Cleveland, read a paper on Carcinoma a Form of Perverted Nutrition. Dr. J. C. Reeve, of Dayton, read a paper upon the A. C. E. Mixture. Dr. A. R. Baker, of Cleveland, read a paper on Some Facts Every Practitioner Should Know About Squint.

Dr. G. A. Collamore, of Toledo, was elected President, and Dr. Fitzpatrick, of Cincinnati, Secretary for the ensuing year. The next meeting will be held at Cincinnati in May, 1892.

Congress of American Physicians and Surgeons.—The second triennial session of the Congress of American Physicians and Surgeons will be held at Washington, D. C., September 23, 24 and 25, 1891.

A number of distinguished foreign physicians and surgeons have accepted invitations to attend the session, among them Mr. Thomas Bryant, Mr. B. E. Broadhurst, Mr. A. E. Durham, Mr. Reginald Harrison, Surgeon-General W. E. McKennin, Mr. U. Pritchard, Mr. F. Treves, Sir William MacCormac, Dr. James G. Glover and Dr. William M. Ord, of London, England; Dr. McCall Anderson and Dr. W. T. Gairdner, of Glasgow; Mr. E. H. Bennett and Professor J. J. Cunningham, of Dublin; Professor John Chiene and Dr. J. Battey Tuke, of Edinburgh; Professor H. Krause and Dr. F. Beeby, of Berlin; Professor Curschmann, of Leipzig; Professor Hoffa, of Wurzburg; Professor Kühne, of Heidelberg; M. Emil Juval, M. E. Landolt and Dr. Pozzi, of Paris; Dr. A. Musso, of Turin; Dr. Von Mozengeil, of Bonn; Dr. Löwenber, of Paris; and Dr. Rafail Lavista, of Mexico.

The sessions of the Congress will be held in the Main Hall of the Grand Army Building, 1412 and 1414 Pennsylvania Avenue, from 3 to 6 P.M., daily.

The President's Address will be delivered in the Lecture Hall of the National Museum, Wednesday, September 23d, at 8 P.M.; it will be followed from 9.30 until 12 by the reception of the President. The Army Medical Museum will be open during the evening.

Medical Legislation in the State of Washington.—By an Act of the Legislature, approved April 10, 1890, the State of Washington has a Medical Examining Board, consisting of nine members, "learned and skilled in the practice and theory of medicine and surgery," appointed by the Governor for the terms of three years each. Examinations are held in January and July, alternately in the eastern and western parts of the State, and at such other times as may seem necessary. Applicants for licenses to practise are examined in anatomy, physiology, chemistry, materia medica, therapeutics, preventive medicine, practice of medicine, surgery, obstetrics, diseases of women and children, diseases of the nervous system, diseases of the eye and ear, medical jurisprudence and such other branches as the board shall deem advisable. The consent of five members is necessary for the granting of a license. The examination fee is $10. The board is empowered to refuse or revoke a license for unprofessional or dishonorable conduct, subject to the right of appeal. The words "unprofessional or dishonorable conduct" are used to mean: First, the procuring, or aiding or abetting in procuring, a criminal abortion; second, the employing of what are popularly known as "cappers" or "steerers;" third, the obtaining of any fee on the assurance that a manifestly incurable disease can be permanently cured; fourth, the wilful betrayal of a professional secret; fifth, all advertising of medical business in which untruthful and improbable statements are made; sixth, all advertising of any medicines or of any means whereby the monthly periods of women can be regulated, or the menses reëstablished if suppressed; seventh, conviction of any offence involving moral turpitude; eighth, habitual intemperance.

Infringement of the Act is punishable by a fine of from $50 to $100 and imprisonment of from ten to ninety days.

Indiana State Medical Society.—The forty-second annual session of the Indiana State Medical Society was held at Indianapolis, June 10th and 11th. The Alumni of the Medical College of Indiana celebrated the twenty-first anniversary of its organization by a banquet.

Dr. Theodore Potter presented an interesting report on Bacteriological Investigations. Dr. J. W. Milligan, of Indianapolis, read a paper on Antiseptic Methods Applied to Obstetrics. Dr. C. C. Morris, of Rockville, read a paper on The Salicylic Treatment of Typhoid Fever. Dr. J. A. Sutcliffe, of Indianapolis, presented an interesting paper on Perineal Section, with a number of illustrative cases. Following this Dr. C. H. Smith, of Lebanon, discussed the subject of Abortion. Dr. Owen read a paper on What Should be the Relation of Contract Corporation-Surgeons to the Medical Profession? The subject was referred to a committee consisting of Drs. Owen, Hibberd and Sutcliffe, with instruction to report before the close of the meeting. Dr. M. F. Porter, of Fort Wayne, read the Report of a Case of Sarcoma of the Ovary; Operation and Recovery. After this came a paper by Dr. F. C. Ferguson, of Indianapolis, on Some Fallacies in Gynecology. The subject of Diphtheria was treated by Dr. W. A. McCoy, of Madison. The venerable Dr. Lomax stated that he had encountered the term diphtherite in the beginning of his practice, fifty-four years ago, and the disease soon after; hence it was not, as sometimes supposed, a product of modern civilization. The address of the President, Dr. Gonzalva C. Smythe, of Greencastle, on The Influence of Heredity in Producing Disease and Degeneracy, and Its Remedies,

was an able one. Dr. A. B. Richardson, of Cincinnati, read a paper on Hysteria.

Dr. A. W. Brayton, of Indianapolis, presented a girl, fourteen years old, afflicted with the extremely rare disease of the skin known as xeroderma pigmentosum, or Kaposi's disease. This is the only case known to have been observed in the Mississippi Valley and the eleventh in the United States. Dr. G. W. McCuskey read a paper on Some Needed Medical Legislation. Following this came a paper by Dr. S. M. Voris, of Columbus, on Lacerations of the Perineum, and one by Dr. G. W. Vernon, of Indianapolis, on Vulvo-vaginitis in Children. Papers were read by Dr. F. C. Woodburn, of Indianapolis, on Valvular Heart Diseases; by Dr. S. C. Evans, of Union City, on Nasal and Naso-pharyngeal Reflexes; by Dr. H. McCullough, of Fort Wayne, on Functional Aphonia; by Dr. C. L. Thomas, of Logansport, on Cataract, With or Without Iridectomy; by Dr. Norman Teal, of Kendallville, on Health and Vital Statistics; by Dr. S. W. Gould, of Argos, on Opium and its Preparations; by Dr. M. F. Johnston, of Richmond, on Angina Pectoris.

The following officers were elected for the ensuing year: President, Dr. Edwin Walker, of Evansville; Vice-President, Dr. Erwin Wright, of Huntingdon; Secretary, Dr. I. I. Elder, of Indianapolis; Assistant Secretary, Dr. T. A. Kennedy, of Shelbyville; Treasurer, Dr. J. O. Stiltson, of Indianapolis. The next meeting will be held on the second Thursday of May, 1892.

Sir Prescott Hewitt, the distinguished English surgeon, died recently aged seventy-seven years.

Scanzoni, the distinguished obstetrician and gynecologist, died recently aged seventy years. He succeeded Kievisch as professor of obstetrics at Würzburg, a position that he occupied for thirty-seven years. He was the author of numerous important works in obstetrics and gynecology.

The Mitchell District Medical Society will hold its annual meeting at West Baden Springs, Indiana, July 16 and 17, 1891. A long list of scientific papers will be presented. Dr. A. M. Owens, of Evansville, is the president; Dr. H. W. Shirley, of Shoals, the vice-president; and Dr. George W. Burton, of Mitchell, the secretary of the Society.

Work of the U. S. Army and Navy Medical Examining Boards.—Through the courtesy of the Surgeon-Generals of the Army and Navy I am able to give you the following results of the work of their Examining Boards for the last ten years:

Before the Army Boards 384 candidates presented themselves during this period, of whom 76, or 22.3 per cent., were approved and passed, 31 were rejected for physical disqualifications, 90 failed to pass the preliminary examination and the remainder failed to pass the medical examination. The rejections for physical defects are for the last three years only.

Before the Navy Boards 237 candidates presented themselves, of whom 55, or 23.1 per cent., were approved and passed, 75 were rejected for physical disqualifications, and the remainder either withdrew or failed to pass.

Evidently the standards of the two boards are about the same. The proportion of those rejected for physical defects is noteworthy. In a general way we may say that about one-fourth of the candidates before such boards are approved, and one-fourth fail on the preliminary examination as to general education. Putting aside those rejected for physical causes, and making the necessary corrections for a certain number who came before the boards more than once, we find that of 429 examined, 129, or 30.2 per cent., were successful.

Of those candidates who had a college degree 34 per cent. succeeded, and of those who had no such degree, 28.9 succeeded. Of those candidates who had had one year's residence in a hospital, 40 per cent. passed, while of those who had not been residents, only 21 per cent. were successful. The percentage of successful candidates from different schools varies greatly, ranging from 9 to 56 per cent. for those schools from which more than ten candidates presented themselves. I cannot go into details on this point, but may say that taking the Medical Schools of Harvard, Yale, the College of Physicians, and Bellevue Hospital of New York, the University of Pennsylvania, and the University of Virginia, together, of 141 candidates, 65, or 46.1 per cent., succeeded, while for all the rest of the schools in a body, of 586 candidates, 64, or 22.3 per cent., succeeded.—DR. JOHN S. BILLINGS.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, FROM JUNE 30 TO JULY 6, 1891.

BUELL, JAMES W., *Assistant Surgeon.*—Is retired from active service, by reason of disability incident to the service.

OWEN, WILLIAM S., JR., *Assistant Surgeon.*—Is detailed to attend the encampment of the Illinois National Guard, near Springfield, Ill., from July 18th to 25th, and August 11 to 18, 1891.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE U. S. MARINE-HOSPITAL SERVICE, FOR THE THREE WEEKS ENDING JUNE 27, 1891.

HAMILTON, J. B., *Surgeon.*—Ordered to Washington, D. C., on special duty, June 9, 1891.

GEDDINGS, H. D., *Assistant Surgeon.*—Ordered to New York, N. Y., on special duty, June 13, 1891. Ordered to Washington, D. C., on special duty, June 26, 1891.

WERTENBAKER, C. P., *Assistant Surgeon.*—When relieved at Galveston, Texas, to proceed to Chicago, Ill., for duty, June 23, 1891.

SMITH, A. C., *Assistant Surgeon.*—Relieved from duty at New Orleans, La.; ordered to Galveston, Texas, June 23, 1891.

STIMPSON, W. G., *Assistant Surgeon.*—Ordered to New York, N. Y., for temporary duty, June 12, 1891.

ROSENAU, M. J., *Assistant Surgeon.*—When relieved at Chicago, Ill., to proceed to New Orleans, La., for duty, June 23, 1891.
